



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 154870

TO: Rei-Tsang Shiao
Location: 5a10 / 5c18
Friday, June 03, 2005
Art Unit: 1626
Phone: 571-272-0707
Serial Number: 10 / 718596

From: Jan Delaval
Location: Biotech-Chem Library
Remsen 1a51
Phone: 571-272-2504
jan.delaval@uspto.gov

Search Notes

Jan. Delard
for search

154870
SEARCH REQUEST FORM

Access DB# _____

Scientific and Technical Information Center

Requester's Full Name: Robert (Reto) Shiao Examiner #: 79521 Date: 3/1/05
Art Unit: 1626 Phone Number: 2-0707 Serial Number: 10/7/8596
Mail Box and Bldg/Room Location: 5A10/SC18 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

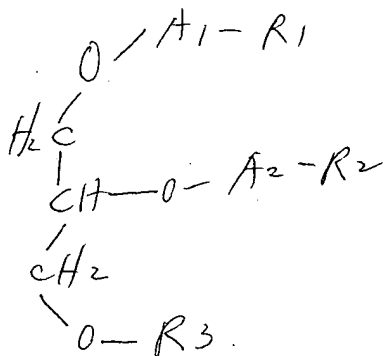
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Methods employing
Inventors (please provide full names): Harold et al.

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

I. Search method of use of cpd I
(see claim 1)



1. A₁, A₂ are C.

2. R₁, R₂, R₃ are sub.

STAFF USE ONLY

Searcher: Car
Searcher Phone #: 22504
Searcher Location: _____
Date Searcher Picked Up: 6/3/05
Date Completed: 6/3/05
Searcher Prep & Review Time: _____
Clerical Prep Time: 30
Online Time: +60

Type of Search

NA Sequence (#) _____
AA Sequence (#) _____
Structure (#) ✓
Bibliographic _____
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors and cost where applicable

STN ✓
Dialog _____
Questel/Orbit _____
Dr.Link _____
Lexis/Nexis _____
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:36:13 ON 03 JUN 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUN 2005 HIGHEST RN 851509-21-2

DICTIONARY FILE UPDATES: 1 JUN 2005 HIGHEST RN 851509-21-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

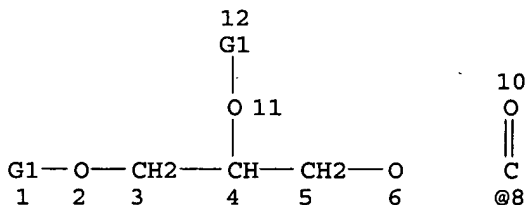
```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*
*****
```

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sta que 130

L15 STR



VAR G1=CH2/8

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

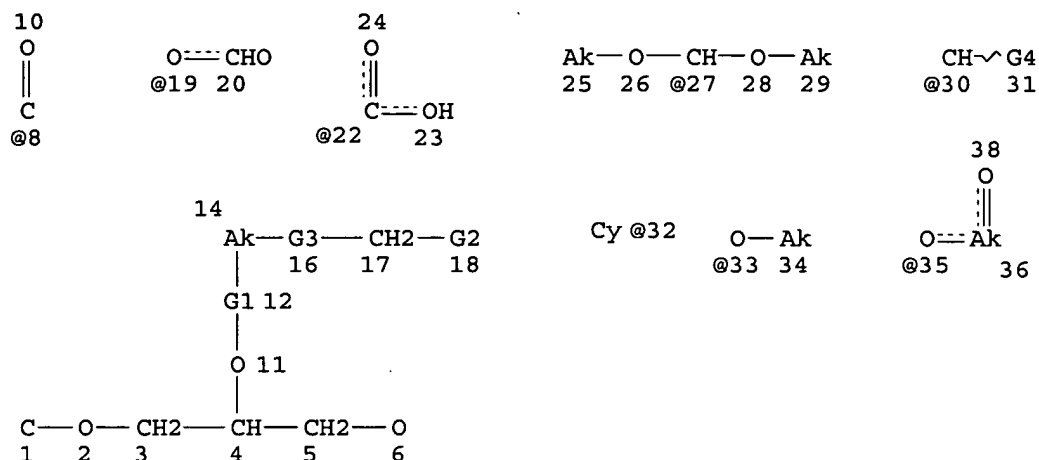
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L17 44013 SEA FILE=REGISTRY SSS FUL L15

L21 STR



VAR G1=CH2/8
 VAR G2=CHO/19/22/27/OH
 VAR G3=CH2/30
 VAR G4=19/OH/AK/33/X/35/32

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 1
 CONNECT IS M1 RC AT 6
 CONNECT IS M1 RC AT 32
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

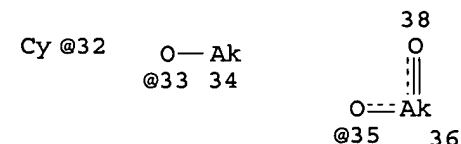
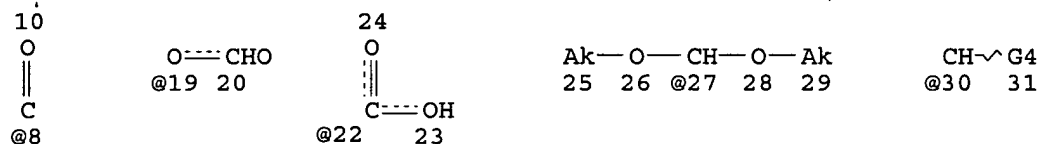
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE

L23 353 SEA FILE=REGISTRY SUB=L17 CSS FUL L21

L24 STR



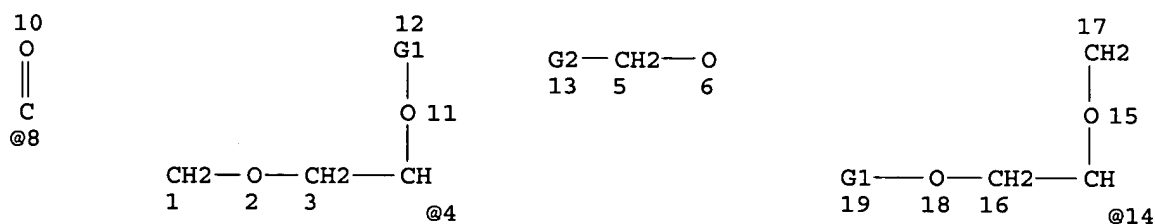
VAR G1=CH2/8

VAR G2=CHO/19/22/27/OH
 VAR G3=CH2/30
 VAR G4=19/OH/AK/33/X/35/32
 NODE ATTRIBUTES:
 CONNECT IS M1 RC AT 6
 CONNECT IS M1 RC AT 12
 CONNECT IS M1 RC AT 32
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE

L26 276 SEA FILE=REGISTRY SUB=L17 CSS FUL L24
 L27 STR



VAR G1=CH2/8
 VAR G2=4/14
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L28 494 SEA FILE=REGISTRY ABB=ON PLU=ON L23 OR L26
 L30 152 SEA FILE=REGISTRY SUB=L28 SSS FUL L27

100.0% PROCESSED 494 ITERATIONS 152 ANSWERS
 SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 08:38:58 ON 03 JUN 2005)
 SET COST OFF

FILE 'HCAPLUS' ENTERED AT 08:39:08 ON 03 JUN 2005

L1 3 S (US6838452 OR US20030225035 OR US2004106677)/PN OR (US2003-71
 L2 2 S L1 NOT RF/TI
 E HARATS D/AU
 L3 102 S E3,E4
 E DROR/AU
 E GEORGE J/AU
 L4 700 S E3-E32,E35-E38

jan delaval - 3 june 2005

L5 E HALPERIN G/AU
81 S E3,E5,E6
E VASCULAR BIO/PA,CS
L6 7 S E15-E20
L7 2 S L2 AND L3-L6
L8 933 S (OXIDIZ? OR OXIDIS?) (S)?PHOSPHOLIPID?
E PHOSPHOLIPID/CT
L9 549 S E32+OLD,NT,PFT,RT (L) (OXIDIZ? OR OXIDIS?)
L10 825 S E58-E71 AND (OXIDIS? OR OXIDIZ?)
L11 1619 S L8-L10
L12 7 S L2-L7 AND L11
L13 7 S L2,L12
SEL RN

FILE 'REGISTRY' ENTERED AT 08:49:00 ON 03 JUN 2005

L14 43 S E1-E43
L15 STR
L16 50 S L15
L17 44013 S L15 FUL
SAV TEMP L17 SHIAO718/A
L18 STR L15
L19 2 S L18 CSS SAM SUB=L17
L20 206 S L18 CSS FUL SUB=L17
SAV L20 SHIAO718A/A
L21 STR L15
L22 12 S L21 CSS SAM SUB=L17
L23 353 S L21 CSS FUL SUB=L17
SAV L23 SHIAO718B/A
L24 STR L21
L25 10 S L24 CSS SAM SUB=L17
L26 276 S L24 CSS FUL SUB=L17
SAV L26 SHIAO718C/A
L27 STR L15
L28 494 S L23 OR L26
L29 9 S L27 SAM SUB=L28
L30 152 S L27 FUL SUB=L28
SAV L30 SHIAO718D/A
L31 6 S L14 AND L30
L32 17 S L14 AND L17
L33 11 S L32 NOT L31
L34 17 S L30 AND PMS/CI
L35 129 S L30 NOT L31,L34
L36 3 S L35 AND NC>=2
L37 1 S L36 AND C14H28NO10P
L38 126 S L35 NOT L36
L39 51 S L38 AND P/ELS
L40 45 S L39 AND N/ELS
L41 6 S L39 NOT L40
L42 7 S L40 AND NR>=1
L43 5 S L42 AND (C23H38NO10P OR C24H40NO10P OR C32H62NO8P)
L44 2 S L42 NOT L43
L45 38 S L40 NOT L42-L44
L46 10 S L45 AND (C23H46NO10P OR C27H55N2O9P OR C22H44NO10P OR C18H38N
L47 9 S L46 NOT 91921-89-0
L48 29 S L45 NOT L47
L49 38 S L31,L37,L44,L48
SAV L49 SHIAO718E/A

FILE 'HCAOLD' ENTERED AT 09:28:16 ON 03 JUN 2005

L50 0 S L49

FILE 'HCAPLUS' ENTERED AT 09:28:21 ON 03 JUN 2005

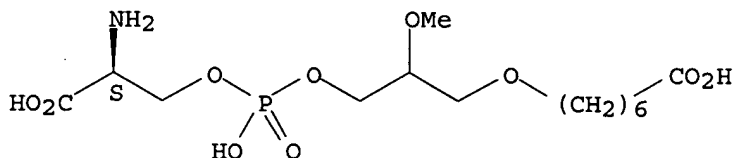
L51 34 S L49
 L52 2 S L51 AND L2-L7,L12,L13
 L53 32 S L51 NOT L52
 L54 27 S L53 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)
 L55 1 S L49 (L) (THU OR PAC OR PKT OR DMA OR DGN)/RL AND L54
 L56 2 S L49 (L) BAC/RL AND L54
 L57 10 S L49 (L) BIOL+NT/RL AND L54
 L58 5 S L52,L55,L56
 L59 7 S L57 NOT L58
 SEL DN AN 3 4
 L60 2 S L59 AND E44-E49
 L61 6 S L54 AND P/DT
 L62 11 S L58,L60,L61
 L63 18 S L54 NOT L62
 SEL DN AN 7 9-15 18
 L64 9 S L63 AND E50-E76
 L65 20 S L62,L64

FILE 'REGISTRY' ENTERED AT 09:36:13 ON 03 JUN 2005

=> d ide can tot l49

L49 ANSWER 1 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 762209-70-1 REGISTRY
 ED Entered STN: 13 Oct 2004
 CN L-Serine, 3-[(6-carboxyhexyl)oxy]-2-methoxypropyl hydrogen phosphate
 (ester) (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C14 H28 N O10 P
 CI COM
 SR CA

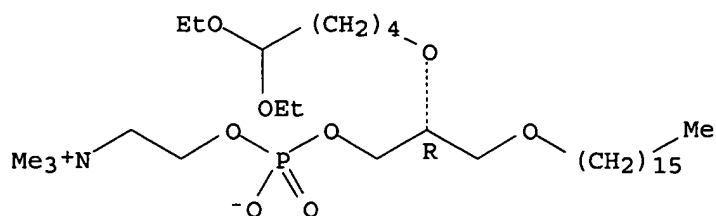
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L49 ANSWER 2 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 630112-43-5 REGISTRY
 ED Entered STN: 24 Dec 2003
 CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-[(5,5-diethoxypentyl)oxy]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C33 H70 N O8 P
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:13083

L49 ANSWER 3 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 630112-42-4 REGISTRY

ED Entered STN: 24 Dec 2003

CN 2,8,11,13-Tetraoxa-12-phosphapentadecan-15-aminium, 9-
[(hexadecyloxy)methyl]-12-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt,
12-oxide, (9R)- (9CI) (CA INDEX NAME)

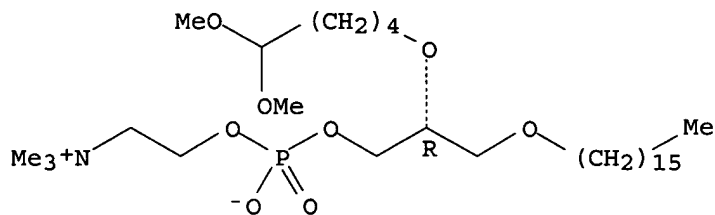
FS STEREOSEARCH

MF C31 H66 N O8 P

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:13083

L49 ANSWER 4 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 630112-41-3 REGISTRY

ED Entered STN: 24 Dec 2003

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxybutoxy)-4-hydroxy-
N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

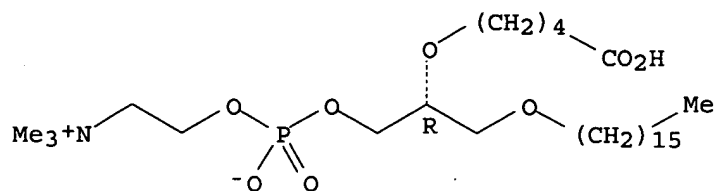
FS STEREOSEARCH

MF C29 H60 N O8 P

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

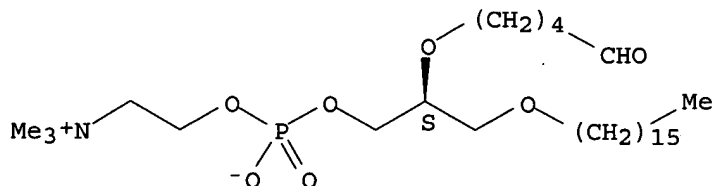
REFERENCE 1: 140:13083

L49 ANSWER 5 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 431948-24-2 REGISTRY
ED Entered STN: 18 Jun 2002
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7S)-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN L-ALLE
FS STEREOSEARCH
MF C29 H60 N O7 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:13083

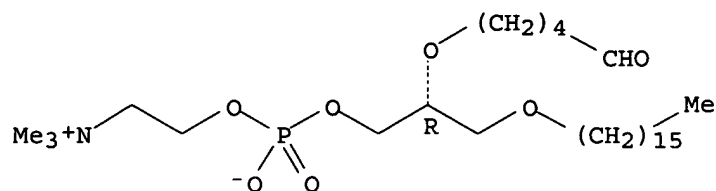
REFERENCE 2: 136:395962

L49 ANSWER 6 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 431948-23-1 REGISTRY
ED Entered STN: 18 Jun 2002
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7R)-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN D-ALLE
FS STEREOSEARCH
MF C29 H60 N O7 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.

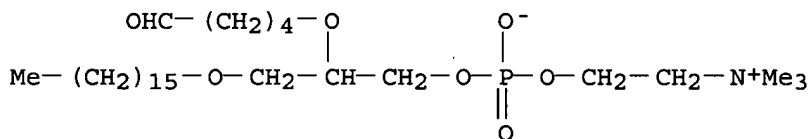


2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:13083

REFERENCE 2: 136:395962

L49 ANSWER 7 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 431063-10-4 REGISTRY
ED Entered STN: 17 Jun 2002
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-
[(5-oxopentyl)oxy]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H60 N O7 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

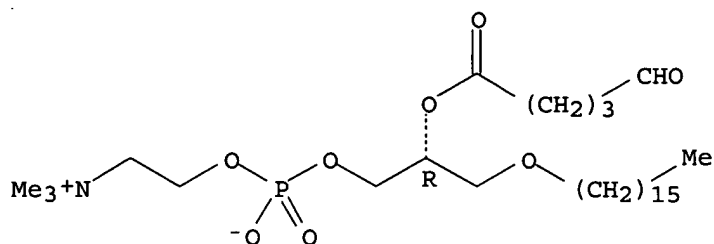


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:395962

L49 ANSWER 8 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 409082-66-2 REGISTRY
ED Entered STN: 30 Apr 2002
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-7-[(1,5-
dioxopentyl)oxy]-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA
INDEX NAME)
FS STEREOSEARCH
MF C29 H58 N O8 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

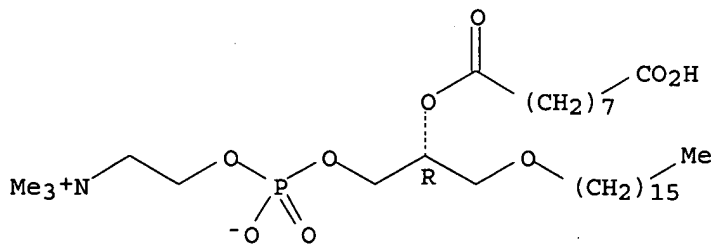


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:292715

L49 ANSWER 9 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 354583-69-0 REGISTRY
ED Entered STN: 04 Sep 2001
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-[(8-carboxy-1-oxooctyl)oxy]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C33 H66 N 09 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



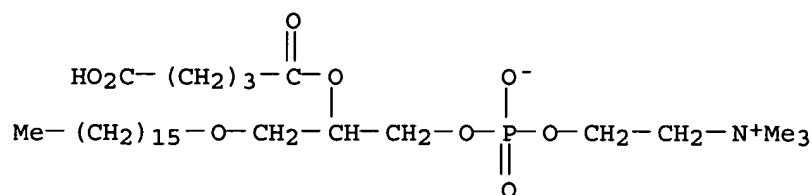
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:343506

REFERENCE 2: 137:42041

REFERENCE 3: 135:164879

L49 ANSWER 10 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 217322-89-9 REGISTRY
ED Entered STN: 17 Jan 1999
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxy-1-oxobutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H58 N 09 P
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 130:50286

L49 ANSWER 11 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 184580-60-7 REGISTRY

ED Entered STN: 01 Jan 1997

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(9-oxononyl)oxy]-, inner salt, 4-oxide, (R)-(9CI) (CA INDEX NAME)

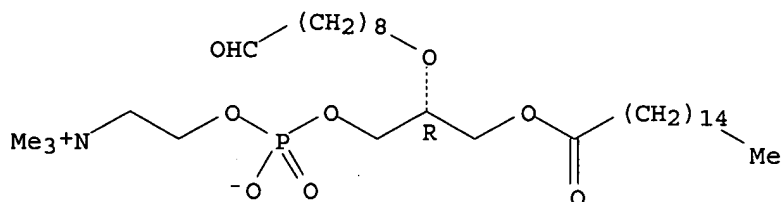
FS STEREOSEARCH

MF C33 H66 N 08 P

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:27954

L49 ANSWER 12 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 160205-05-0 REGISTRY

ED Entered STN: 18 Jan 1995

CN 3,5,9-Trioxa-4-phosphaeicosan-1-aminium, 20-carboxy-4-hydroxy-7-methoxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)-(9CI) (CA INDEX NAME)

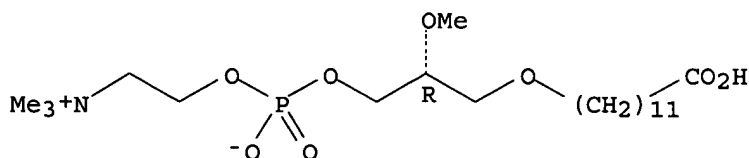
FS STEREOSEARCH

MF C21 H44 N 08 P

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



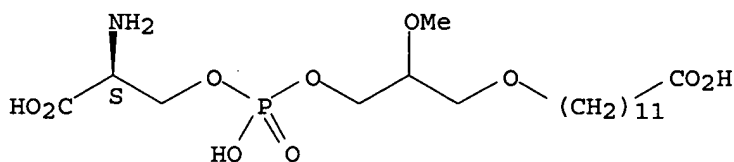
jan delaval - 3 june 2005

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 122:64499

L49 ANSWER 13 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 156666-00-1 REGISTRY
 ED Entered STN: 29 Jul 1994
 CN L-Serine, 3-[(11-carboxyundecyl)oxy]-2-methoxypropyl hydrogen phosphate
 (ester) (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C19 H38 N O10 P
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



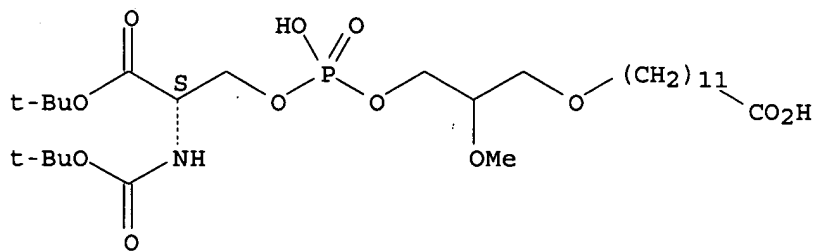
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:99076

L49 ANSWER 14 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 156665-96-2 REGISTRY
 ED Entered STN: 29 Jul 1994
 CN L-Serine, N-[(1,1-dimethylethoxy)carbonyl]-, 1,1-dimethylethyl ester,
 3-[(11-carboxyundecyl)oxy]-2-methoxypropyl hydrogen phosphate (ester)
 (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C28 H54 N O12 P
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

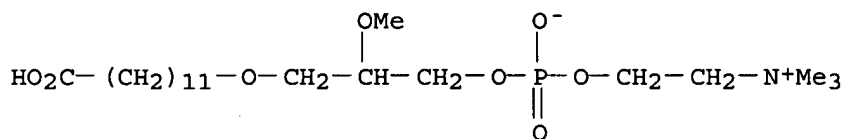


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:99076

L49 ANSWER 15 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 156665-94-0 REGISTRY
 ED Entered STN: 29 Jul 1994
 CN 3,5,9-Trioxa-4-phosphaeicosan-1-aminium, 20-carboxy-4-hydroxy-7-methoxy-
 N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C21 H44 N O8 P
 SR CA
 LC STN Files: CA, CAPLUS

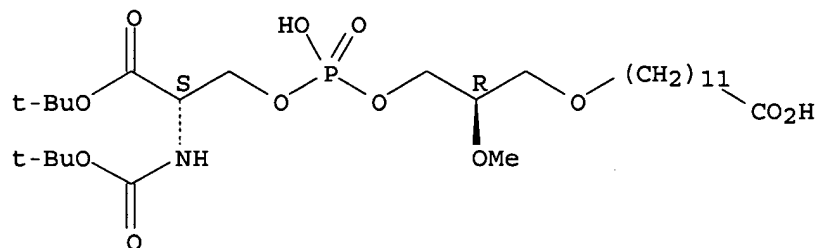


1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:99076

L49 ANSWER 16 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 153965-48-1 REGISTRY
 ED Entered STN: 30 Mar 1994
 CN L-Serine, N-[(1,1-dimethylethoxy)carbonyl]-, 1,1-dimethylethyl ester,
 3-[(11-carboxyundecyl)oxy]-2-methoxypropyl hydrogen phosphate (ester),
 (R)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C28 H54 N O12 P
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



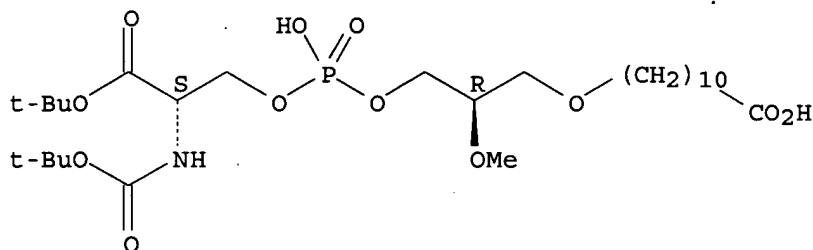
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 120:218324

L49 ANSWER 17 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 153366-62-2 REGISTRY
ED Entered STN: 02 Mar 1994
CN L-Serine, N-[(1,1-dimethylethoxy)carbonyl]-, 1,1-dimethylethyl ester,
3-[(10-carboxydecyl)oxy]-2-methoxypropyl hydrogen phosphate (ester), (R)-
(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H52 N O12 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



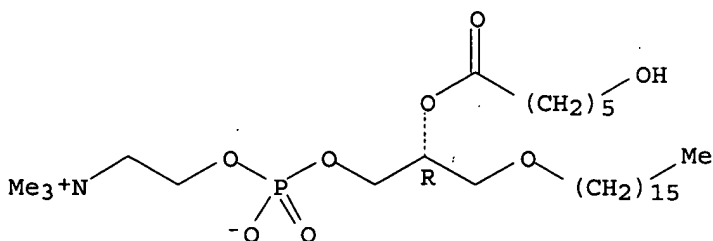
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 120:158095

L49 ANSWER 18 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 153285-65-5 REGISTRY
ED Entered STN: 25 Feb 1994
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-7-[(6-hydroxy-1-oxohexyl)oxy]-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H62 N O8 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

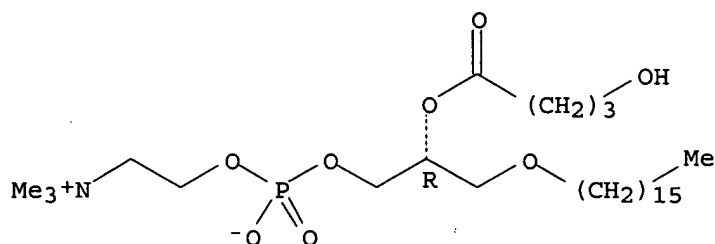


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 120:130592

L49 ANSWER 19 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 153285-64-4 REGISTRY
ED Entered STN: 25 Feb 1994
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-7-(4-hydroxy-1-oxobutoxy)-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H58 N O8 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

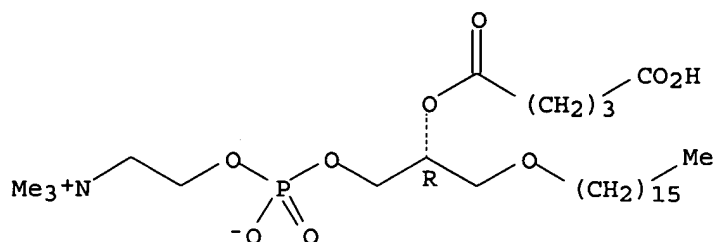


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 120:130592

L49 ANSWER 20 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 153285-63-3 REGISTRY
ED Entered STN: 25 Feb 1994
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxy-1-oxobutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxy-1-oxobutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)-
FS STEREOSEARCH
MF C29 H58 N O9 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



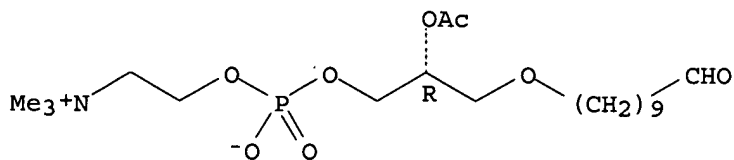
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:20887

REFERENCE 2: 120:130592

L49 ANSWER 21 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 142609-67-4 REGISTRY
ED Entered STN: 24 Jul 1992
CN 3,5,9-Trioxa-4-phosphanonadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-19-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H40 N O8 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

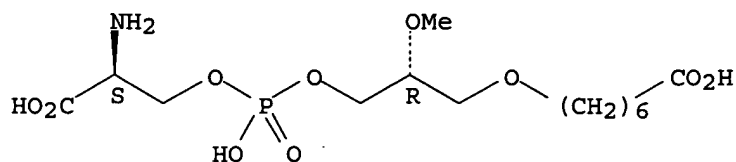


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 117:68162

L49 ANSWER 22 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 141650-21-7 REGISTRY
ED Entered STN: 05 Jun 1992
CN L-Serine, 3-[(6-carboxyhexyl)oxy]-2-methoxypropyl hydrogen phosphate (ester), (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H28 N O10 P
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.



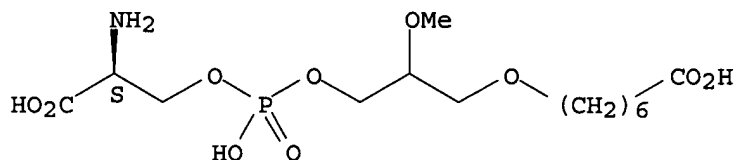
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 117:1100

L49 ANSWER 23 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 138594-12-4 REGISTRY
ED Entered STN: 24 Jan 1992
CN L-Serine, 3-[(6-carboxyhexyl)oxy]-2-methoxypropyl hydrogen phosphate
(ester), monosodium salt (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H28 N O10 P . Na
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
CRN (762209-70-1)

Absolute stereochemistry.



● Na

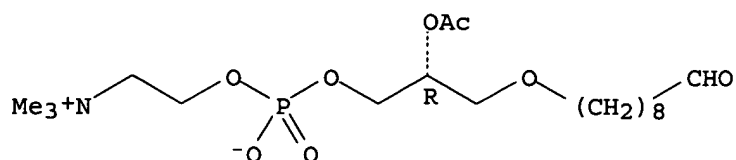
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:106720

REFERENCE 2: 116:59893

L49 ANSWER 24 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 131418-02-5 REGISTRY
ED Entered STN: 11 Jan 1991
CN 3,5,9-Trioxa-4-phosphaoctadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-18-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H38 N O8 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



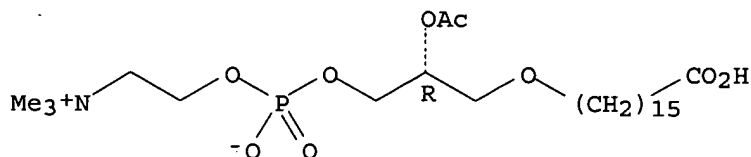
2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 117:3685

REFERENCE 2: 114:40661

L49 ANSWER 25 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 129879-41-0 REGISTRY
 ED Entered STN: 12 Oct 1990
 CN 3,5,9-Trioxa-4-phosphatetracosan-1-aminium, 7-(acetyloxy)-24-carboxy-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C26 H52 N O9 P
 SR CA
 LC STN Files: CA, CAPLUS, MEDLINE

Absolute stereochemistry.



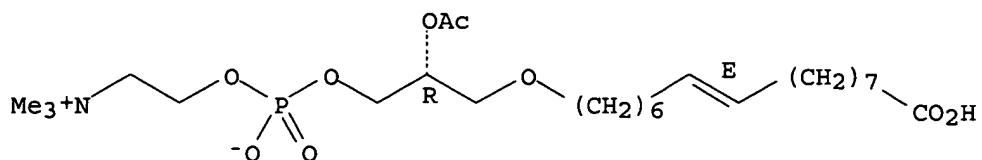
2 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:39343

REFERENCE 2: 113:172541

L49 ANSWER 26 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 129879-40-9 REGISTRY
 ED Entered STN: 12 Oct 1990
 CN 3,5,9-Trioxa-4-phosphatetracos-16-en-1-aminium, 7-(acetyloxy)-24-carboxy-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, [R-(E)]- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C26 H50 N O9 P
 SR CA
 LC STN Files: CA, CAPLUS

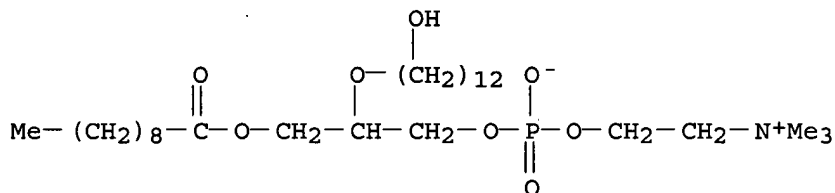
Absolute stereochemistry.
 Double bond geometry as shown.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 113:172541

L49 ANSWER 27 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 126069-43-0 REGISTRY
ED Entered STN: 30 Mar 1990
CN 3,5,8-Trioxa-4-phosphaeicosan-1-aminium, 4,20-dihydroxy-N,N,N-trimethyl-7-
[[[(1-oxodecyl)oxy]methyl]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H62 N O8 P
SR CA
LC STN Files: CA, CAPLUS

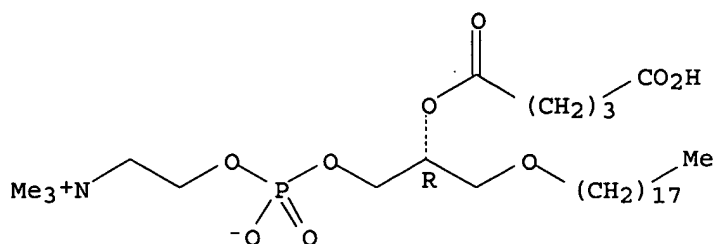


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 112:158831

L49 ANSWER 28 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
RN 125001-84-5 REGISTRY
ED Entered STN: 26 Jan 1990
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 7-(4-carboxy-1-oxobutoxy)-4-
hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C31 H62 N O9 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 112:77856

L49 ANSWER 29 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 123473-54-1 REGISTRY

ED Entered STN: 27 Oct 1989

CN 3,5,9-Trioxa-4-phosphaheneicosan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-21-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

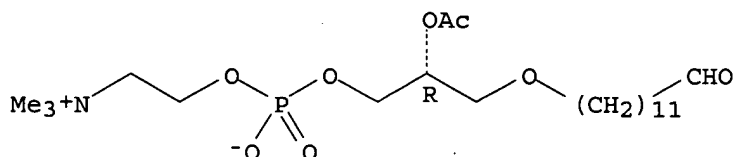
FS STEREOSEARCH

MF C22 H44 N O8 P

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 111:192750

L49 ANSWER 30 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 123473-53-0 REGISTRY

ED Entered STN: 27 Oct 1989

CN 2,15,19,21-Tetraoxa-20-phosphatricosan-23-aminium, 17-(acetyloxy)-20-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 20-oxide, (R)- (9CI) (CA INDEX NAME)

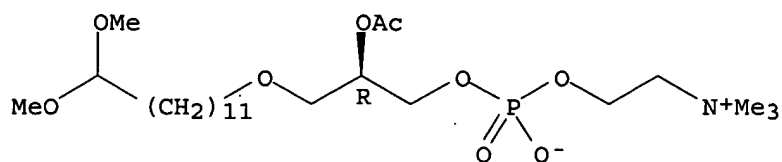
FS STEREOSEARCH

MF C24 H50 N O9 P

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



4 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:104015

REFERENCE 2: 114:99515

REFERENCE 3: 113:170033

REFERENCE 4: 111:192750

L49 ANSWER 31 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 119142-21-1 REGISTRY

ED Entered STN: 17 Feb 1989

CN 3,5,9-Trioxa-4-phosphapentadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-15-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

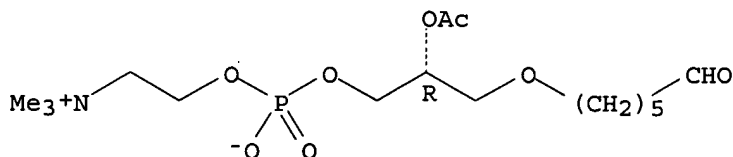
FS STEREOSEARCH

MF C16 H32 N O8 P

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 111:192750

REFERENCE 2: 110:91686

L49 ANSWER 32 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 119142-20-0 REGISTRY

ED Entered STN: 17 Feb 1989

CN 2,9,13,15-Tetraoxa-14-phosphaheptadecan-17-aminium, 11-(acetyloxy)-14-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 14-oxide, (R)- (9CI) (CA INDEX NAME)

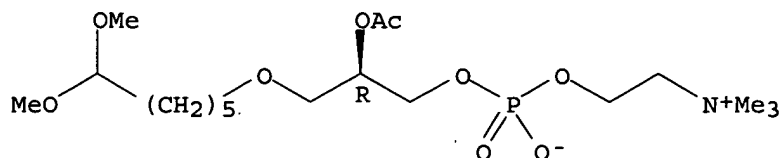
FS STEREOSEARCH

MF C18 H38 N O9 P

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:104015

REFERENCE 2: 114:99515

REFERENCE 3: 113:170033

REFERENCE 4: 111:192750

REFERENCE 5: 110:91686

L49 ANSWER 33 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 117320-06-6 REGISTRY

ED Entered STN: 05 Nov 1988

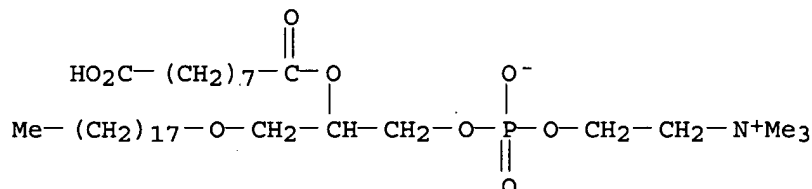
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 7-[(8-carboxy-1-oxooctyl)oxy]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C35 H70 N O9 P

SR CA

LC STN Files: CA, CAPLUS, MEDLINE, TOXCENTER



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:209206

L49 ANSWER 34 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN

RN 117045-25-7 REGISTRY

ED Entered STN: 22 Oct 1988

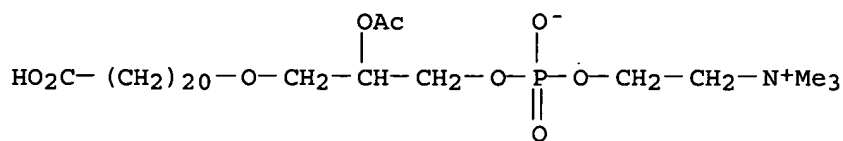
CN 3,5,9-Trioxa-4-phosphanonacosan-1-aminium, 7-(acetyloxy)-29-carboxy-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C31 H62 N O9 P

SR CA

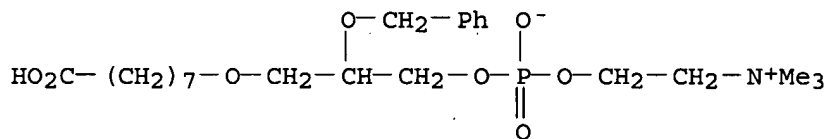
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:170803

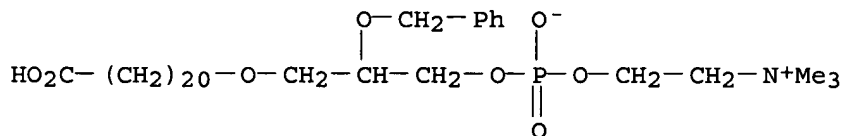
L49 ANSWER 35 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 117030-31-6 REGISTRY
 ED Entered STN: 22 Oct 1988
 CN 3,5,9-Trioxa-4-phosphahexadecan-1-aminium, 16-carboxy-4-hydroxy-N,N,N-trimethyl-7-(phenylmethoxy)-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C23 H40 N O8 P
 SR CA
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:170803

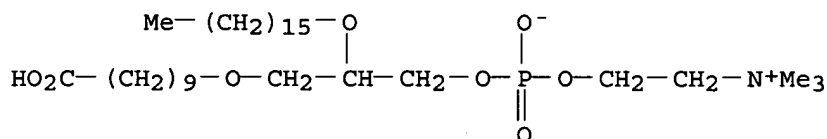
L49 ANSWER 36 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 117030-25-8 REGISTRY
 ED Entered STN: 22 Oct 1988
 CN 3,5,9-Trioxa-4-phosphanonacosan-1-aminium, 29-carboxy-4-hydroxy-N,N,N-trimethyl-7-(phenylmethoxy)-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C36 H66 N O8 P
 SR CA
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:170803

L49 ANSWER 37 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 91921-89-0 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 3,5,8-Trioxa-4-phosphatetracosan-1-aminium, 7-[[(9-carboxynonyl)oxy]methyl]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 DR 93621-80-8
 MF C34 H70 N O8 P
 LC STN Files: CA, CAPLUS

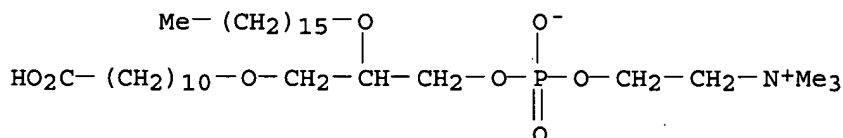


2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 102:4277

REFERENCE 2: 101:130525

L49 ANSWER 38 OF 38 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 78273-53-7 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 3,5,8-Trioxa-4-phosphatetracosan-1-aminium, 7-[[(10-carboxydecyl)oxy]methyl]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 3,5,8-Trioxa-4-phosphatetracosan-1-aminium, 7-[[(10-carboxydecyl)oxy]methyl]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (±)-
 FS 3D CONCORD
 MF C35 H72 N O8 P
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 95:42295

=> fil hcaplus
 FILE 'HCAPLUS' ENTERED AT 09:36:40 ON 03 JUN 2005
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Jun 2005 VOL 142 ISS 24
FILE LAST UPDATED: 2 Jun 2005 (20050602/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot 165

L65 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:950047 HCAPLUS
DN 140:13083
ED Entered STN: 05 Dec 2003
TI Methods and compositions using defined **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders
IN **Harats, Dror; George, Jacob; Halperin, Gideon**
PA **Vascular Biogenics Ltd., Israel**
SO U.S. Pat. Appl. Publ., 37 pp., Cont.-in-part of Appl. No. PCT/IL01/01080.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K031-685
ICS C07F009-02
INCL 514078000; 514114000; 554079000
CC 1-12 (Pharmacology)
Section cross-reference(s): 29, 63
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003225035	A1	20031204	US 2003-445347	20030527 <--
	US 6838452	B2	20050104		
	WO 2002041827	A2	20020530	WO 2001-IL1080	20011122 <--
	WO 2002041827	A3	20021010		
	WO 2002041827	C2	20030530		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2004106677	A1	20040603	US 2003-718596	20031124 <--
	WO 2004106486	A2	20041209	WO 2004-IL453	20040527 <--

WO 2004106486 A3 20050106

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

PRAI US 2000-252574P P 20001124 <--
 WO 2001-IL1080 A2 20011122 <--
 US 2003-445347 A3 20030527 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003225035	ICM	A61K031-685
	ICS	C07F009-02
	INCL	514078000; 514114000; 554079000
US 2003225035	NCL	514/114.000; 558/169.000; 558/170.000; 558/172.000
	ECLA	A61K031/075; A61K031/08; A61K031/11; A61K031/19; A61K031/20; A61K031/215; A61K031/24; A61K031/685; C07C043/13C2; C07C043/178M; C07C043/178P <--
WO 2002041827	ECLA	A61K031/075; A61K031/08; A61K031/11; A61K031/19; A61K031/20; A61K031/215; A61K031/24; A61K031/685; C07C043/178M; C07C043/178P <--
US 2004106677	NCL	514/547.000
	ECLA	A61K031/075; A61K031/08; A61K031/11; A61K031/19; A61K031/20; A61K031/215; A61K031/24; A61K031/685; C07C043/13C2; C07C043/178M; C07C043/178P <--
WO 2004106486	ECLA	C07C043/13C2; C07C043/178M; C07C043/178P <--

OS MARPAT 140:13083

AB The invention provides synthetic forms of etherified **oxidized phospholipids** and methods of utilizing them for preventing and treating atherosclerosis and other related disorders, as well as inflammatory disorders, immune-mediated diseases, autoimmune diseases, and proliferative disorders. In addition, methods of synthesizing etherified and esterified **oxidized phospholipids** and of using them for preventing and treating atherosclerosis and other related disorders are also provided.

ST **oxidized phospholipid** prepn atherosclerosis treatment;
inflammation immune disease treatment **oxidized phospholipid**;
autoimmune disease treatment **oxidized phospholipid**;
proliferative disorder treatment **oxidized phospholipid**

IT Antiarteriosclerotics
(antiatherosclerotics; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Brain, disease
(cerebrovascular; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT **Cardiolipins**
Phosphatidylcholines, biological studies
Phosphatidylethanolamines, biological studies
Phosphatidylinositols
Phosphatidylserines

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(derivs.; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Immunity
(disorder; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Drugs
(gastrointestinal; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Intestine, disease
(inflammatory; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Drug delivery systems
(injections, i.p.; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Rheumatoid arthritis
(juvenile; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(low-d., **oxidized**, immune tolerance to; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Lipoproteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(low-d., synthetic derivs.; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Mucous membrane
(mucosal adjuvant; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders, and use with other agents)

IT Drug delivery systems
(mucosal; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Drug delivery systems
(nasal; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Drug delivery systems
(oral; **oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Antirheumatic agents
Antitumor agents
Atherosclerosis
Autoimmune disease
Cardiovascular agents
Cardiovascular system, disease
Cytotoxic agents
Drug delivery systems
Human
Neoplasm
Oxidation
Rheumatoid arthritis
(**oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT Interleukin 10
Interleukin 12
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**oxidized phospholipids** for prevention and treatment of atherosclerosis and other disorders)

IT **Phospholipids, reactions**

RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidized phospholipids for prevention and
 treatment of atherosclerosis and other disorders)

IT Analgesics
 Anti-inflammatory agents
 Inflammation
 Pain
 (oxidized phospholipids for prevention and
 treatment of atherosclerosis and other disorders, and use with other
 agents)

IT Corticosteroids, biological studies
 Growth factors, animal
 Toxins
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (oxidized phospholipids for prevention and
 treatment of atherosclerosis and other disorders, and use with other
 agents)

IT Blood vessel, disease
 (peripheral; oxidized phospholipids for prevention
 and treatment of atherosclerosis and other disorders)

IT Disease, animal
 (proliferative; oxidized phospholipids for
 prevention and treatment of atherosclerosis and other disorders)

IT Artery, disease
 (restenosis; oxidized phospholipids for prevention
 and treatment of atherosclerosis and other disorders)

IT Blood vessel, disease
 (stenosis; oxidized phospholipids for prevention
 and treatment of atherosclerosis and other disorders)

IT Medical goods
 (stents, in-stent stenosis; oxidized phospholipids
 for prevention and treatment of atherosclerosis and other disorders)

IT Immune tolerance
 (to oxidized LDL; oxidized phospholipids
 for prevention and treatment of atherosclerosis and other disorders)

IT Antigens
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (tolerizing; oxidized phospholipids for prevention
 and treatment of atherosclerosis and other disorders, and use with
 other agents)

IT Interferons
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (γ; oxidized phospholipids for prevention and
 treatment of atherosclerosis and other disorders)

IT 9028-35-7, HMG-CoA reductase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; oxidized phospholipids for prevention
 and treatment of atherosclerosis and other disorders, and use with
 other agents)

IT 431948-23-1P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); RACT (Reactant or reagent); USES (Uses)
 (oxidized phospholipids for prevention and
 treatment of atherosclerosis and other disorders)

IT 157953-13-4P 431948-24-2P 630112-41-3P
 630112-42-4P 630112-43-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)

RL: RCT (Reactant); RACT (Reactant or reagent)

(oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)

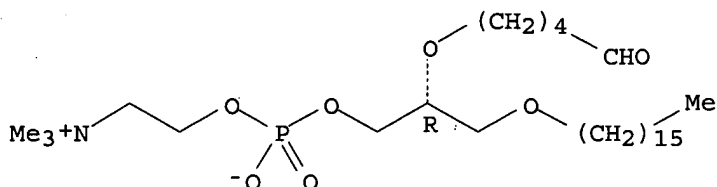
(oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-
[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

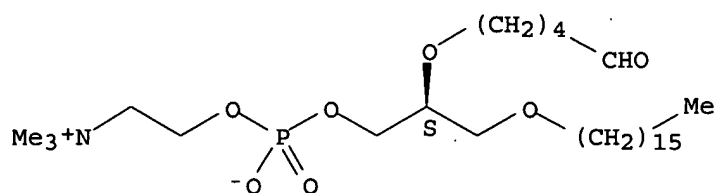


RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-
[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7S)- (9CI) (CA INDEX NAME)

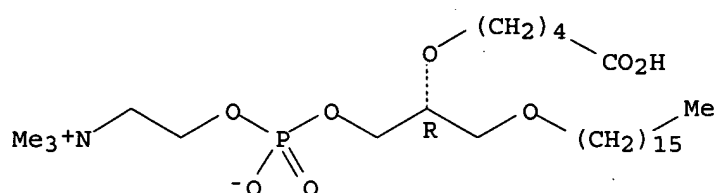
Absolute stereochemistry.



RN 630112-41-3 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxybutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

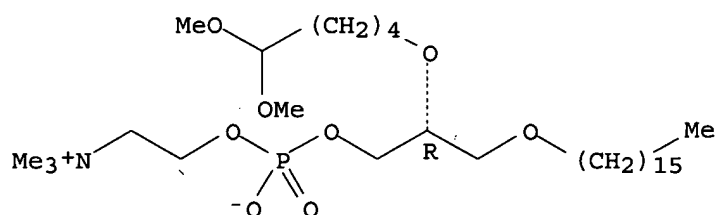
Absolute stereochemistry.



RN 630112-42-4 HCAPLUS

CN 2,8,11,13-Tetraoxa-12-phosphapentadecan-15-aminium, 9-[(hexadecyloxy)methyl]-12-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 12-oxide, (9R)- (9CI) (CA INDEX NAME)

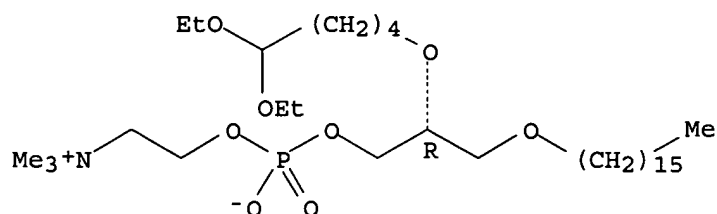
Absolute stereochemistry.



RN 630112-43-5 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-[(5,5-diethoxypentyl)oxy]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:408469 HCAPLUS
 DN 136:395962
 ED Entered STN: 31 May 2002
 TI Methods employing and compositions containing defined **oxidized phospholipids** for prevention and treatment of atherosclerosis
 IN **Harats, Dror; George, Jacob; Halperin, Gideon**
 PA Cardimmune Ltd., Israel; **Vascular Biogenics Ltd.**
 SO PCT Int. Appl., 73 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K
 CC 1-8 (Pharmacology)
 Section cross-reference(s): 15, 23, 63

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002041827	A2	20020530	WO 2001-IL1080	20011122 <--
	WO 2002041827	A3	20021010		
	WO 2002041827	C2	20030530		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2429817	AA	20020530	CA 2001-2429817	20011122 <--
	AU 2002018461	A5	20020603	AU 2002-18461	20011122 <--
	EP 1341543	A2	20030910	EP 2001-997274	20011122 <--
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004537498	T2	20041216	JP 2002-544008	20011122 <--
	US 2003225035	A1	20031204	US 2003-445347	20030527 <--
	US 6838452	B2	20050104		
	US 2004106677	A1	20040603	US 2003-718596	20031124 <--
PRAI	US 2000-252574P	P	20001124	<--	
	WO 2001-IL1080	W	20011122	<--	
	US 2003-445347	A3	20030527	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002041827	ICM	A61K
WO 2002041827	ECLA	A61K031/075; A61K031/08; A61K031/11; A61K031/19; A61K031/20; A61K031/215; A61K031/24; A61K031/685; C07C043/178M; C07C043/178P
JP 2004537498	FTERM	4C084/AA19; 4C084/MA52; 4C084/MA56; 4C084/MA59; 4C084/NA14; 4C084/ZA082; 4C084/ZA391; 4C084/ZA401; 4C084/ZA451; 4C084/ZB112; 4C084/ZC082; 4C084/ZC202; 4C084/ZC332; 4C086/AA01; 4C086/AA02; 4C086/AA03; 4C086/AA04; 4C086/DA41; 4C086/MA01; 4C086/MA02; 4C086/MA04; 4C086/MA52; 4C086/MA56; 4C086/MA59; 4C086/NA14; 4C086/ZA39; 4C086/ZA40; 4C086/ZA45; 4H050/AA01; 4H050/AB23
US 2003225035	NCL	514/114.000; 558/169.000; 558/170.000; 558/172.000
	ECLA	A61K031/075; A61K031/08; A61K031/11; A61K031/19;

US 2004106677 NCL A61K031/20; A61K031/215; A61K031/24; A61K031/685;
 ECLA C07C043/13C2; C07C043/178M; C07C043/178P <--
 514/547.000
 A61K031/075; A61K031/08; A61K031/11; A61K031/19;
 A61K031/20; A61K031/215; A61K031/24; A61K031/685;
 C07C043/13C2; C07C043/178M; C07C043/178P <--

OS MARPAT 136:395962

AB Novel synthetic forms of etherified **oxidized phospholipids** and methods of utilizing same for preventing and treating atherosclerosis and other related disorders, such as cardiovascular disease, cerebrovascular disease, peripheral vascular disease, stenosis, restenosis, etc., are provided. For example, an effective inhibition of late stage atherogenesis was observed in genetically predisposed (apoE-deficient) mice following protracted oral exposure to moderate doses (1 mg/mouse) of synthetic **oxidized LDL** components, hexadecyl-2-(5'-oxopentanyl)-sn-glycerophosphocholine (ALLE) and 1-hexadecanoyl-2-(5'-oxo)pentanoyl-sn-3-glycerophosphocholine (POVPC) (preparation given), compared to PBS-fed control mice. Induction of oral tolerance had no significant effect on other parameters measured, such as weight gain, total triglyceride or cholesterol blood levels. Surprisingly, it was observed that the inhibition of atherogenesis by these **oxidized LDL** analogs was accompanied by a significant reduction in VLDL cholesterol and triglycerides.

ST **oxidized phospholipid** prepn antiatherosclerotic immunosuppressant LDL; low density lipoprotein immune tolerance **oxidized phospholipid**

IT Mucous membrane
 (adjuvants; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

IT Antiarteriosclerotics
 (antiatherosclerotics; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

IT Glycerides, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (blood, lowering of; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

IT Brain, disease
 (cerebrovascular, agents for treatment of; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

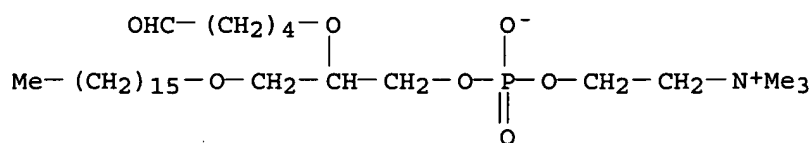
IT Analgesics
 Anti-inflammatory agents
 (combination with; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

IT Corticosteroids, biological studies
 Growth factors, animal
 Toxins
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination with; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

IT Drug delivery systems
 (injections, i.p.; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

- IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(low-d., immune tolerance to **oxidized LDL**; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Drug delivery systems
(mucosal; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Drug delivery systems
(nasal; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Drug delivery systems
(oral; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Immunization
(oral; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT **Phospholipids, biological studies**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**oxidized**; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Blood vessel, disease
(peripheral, agents for treatment of; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Antigens
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**phospholipid** analogs, immunization with; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Cardiovascular agents
Hypolipemic agents
Immunization
Immunosuppressants
(preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Artery, disease
(restenosis, agents for treatment of; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Artery, disease
(stenosis, agents for treatment of; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT Medical goods
(stents, in-stent-stenosis; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)

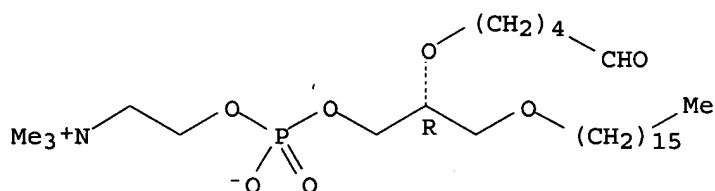
- IT Lipoproteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (very-low-d., reduction of; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT 121324-31-0P, POVPC 431063-10-4P 431948-23-1P, D-ALLE 431948-24-2P, L-ALLE
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (immunization with; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT 9028-35-7, HMG-CoA reductase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors, combination with; preparation and compns. of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT 57-88-5, Cholesterol, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT 124-63-0, Methanesulfonyl chloride 540-51-2, 2-Bromoethanol 821-41-0, 5-Hexen-1-ol 1577-22-6, 5-Hexenoic acid 10025-87-3, Phosphoric trichloride 17327-04-7 17364-16-8 22147-29-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT 506-03-6P 4167-02-6P, 2-Bromoethyl dichlorophosphate 10550-58-0P 30563-15-6P 32899-42-6P 64818-36-6P 431063-02-4P 431063-03-5P 431063-04-6P 431063-05-7P 431063-06-8P 431063-07-9P 431063-08-0P 431063-09-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT 76-83-5, Triphenylchloromethane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (protection with; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- IT 431063-10-4P 431948-23-1P, D-ALLE 431948-24-2P, L-ALLE
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (immunization with; preparation of **oxidized phospholipids** for inducing tolerance to **oxidized LDL** for prevention and treatment of atherosclerosis and related disorders)
- RN 431063-10-4 HCAPLUS
 CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 431948-23-1 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

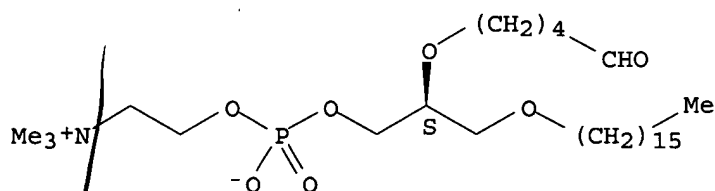
Absolute stereochemistry.



RN 431948-24-2 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:639311 HCAPLUS

DN 130:50286

ED Entered STN: 09 Oct 1998

TI Stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group

AU Kern, Hartmut; Volk, Thomas; Knauer-Schiefer, Suzanne; Mieth, Tanja; Rustow, Bernd; Kox, Wolfgang J.; Schlame, Michael

CS University Hospital Charite, Department of Anesthesiology and Intensive Care Medicine, Humboldt-University, Berlin, 10117, Germany

SO Biochimica et Biophysica Acta (1998), 1394(1), 33-42

CODEN: BBACAQ; ISSN: 0006-3002

PB Elsevier Science B.V.

DT Journal

LA English

CC 13-5 (Mammalian Biochemistry)

AB Oxidation of unsatd. phosphatidylcholine (PC) produces fragmented phospholipids which have similar bioactivities as the platelet-activating factor (PAF, 1-O-alkyl-2-acetyl-PC). Since a large number of mol. species are produced upon PC oxidation, the active ingredients have not been identified. We synthesized several short-chain PCs which are known to be

characteristic PC oxidation products to test their PAF-like activity. The synthetic PCs contained palmitoyl or hexadecyl residues (both C16) in sn-1 position, and propionyl (C3), valeroyl (C5), succinyl (C4 with ω -carboxyl), glutaroyl (C5 with ω -carboxyl), or suberoyl (C8 with ω -carboxyl) residues in sn-2 position. Biol. activity was measured by: (1) increase of intracellular calcium in human monocytes; (2) [3H]serotonin release from rabbit platelets; and (3) aggregation of human platelets. Specificity of the cellular response was tested by inhibition with the PAF-receptor antagonists BN 52021 and WEB 2086. Synthetic PC oxidation products activated both monocytes and platelets in a PAF-specific manner. The effective concentration varied with respect to assay system and chemical structure. In general, 1-hexadecyl-PCs were more effective than 1-palmitoyl-PCs, while increasing chain length in sn-2 position lowered biol. activity. However, several 1-palmitoyl-PCs activated monocytes in concns. between 10^{-8} and 10^{-6} M. In contrast, platelets were less susceptible to 1-palmitoyl-PCs. No significant difference was found between 2-valeroyl-PC (C5 with ω -methyl) and 2-glutaroyl-PC (C5 with ω -carboxyl). The data suggest that typical products of PC oxidation, containing propionyl, succinyl, or glutaroyl residues in sn-2 position, display PAF-like activity at micromolar concns.

ST phosphatidylcholine oxidn product platelet activating factor activity
 IT Platelet (blood)
 (aggregation; stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 IT Phosphatidylcholines, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (oxidation products; stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 IT Cell aggregation
 (platelet; stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 IT Monocyte
 Platelet (blood)
 (stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 IT Platelet-activating factor receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 IT 65154-06-5, PAF 79849-07-3 109667-46-1 118426-34-9 118987-16-9
 135862-04-3 185799-40-0 217322-88-8 217322-89-9
 217322-90-2 217322-91-3
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 IT 7440-70-2, Calcium, biological studies
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 IT 50-67-9, Serotonin, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (stimulation of monocytes and platelets by short-chain phosphatidylcholines with and without terminal carboxyl group)
 RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

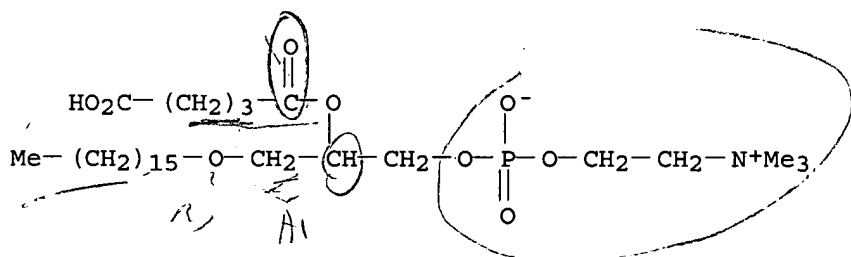
- (1) Bartlett, G; J Biol Chem 1959, V234, P466 HCAPLUS
- (2) Blank, M; Res Commun Chem Pathol Pharmacol 1982, V38, P3 HCAPLUS
- (3) Born, G; Nature 1962, V194, P927 HCAPLUS
- (4) Demopoulos, C; J Biol Chem 1979, V254, P9355 HCAPLUS
- (5) Goetzl, E; Biochem Biophys Res Commun 1980, V94, P881 HCAPLUS
- (6) Hamilton, S; Lipid Analysis A Practical Approach 1992, P13 HCAPLUS
- (7) Hanahan, D; Annu Rev Biochem 1986, V55, P483 HCAPLUS
- (8) Itabe, H; Biochim Biophys Acta 1988, V962, P8 HCAPLUS
- (9) Koltai, M; Textbook of Critical Care Saunders 1995, P215
- (10) Lehr, H; J Clin Invest 1997, V99, P2358 HCAPLUS
- (11) Matuschak, G; Principles of Critical Care 1992, P613
- (12) O'Flaherty, J; Biochim Biophys Acta 1994, V1210, P209 HCAPLUS
- (13) Patel, K; J Biol Chem 1992, V267, P15168 HCAPLUS
- (14) Patton, G; Methods Enzymol 1981, V72, P8 HCAPLUS
- (15) Pryor, W; Ann New York Acad Sci 1993, V686, P12 HCAPLUS
- (16) Schlame, M; J Lipid Res 1996, V37, P2608 HCAPLUS
- (17) Smiley, P; J Biol Chem 1991, V266, P11104 HCAPLUS
- (18) Stremmler, K; J Biol Chem 1991, V266, P11095 HCAPLUS
- (19) Tanaka, T; Biochim Biophys Acta 1994, V1210, P202 HCAPLUS
- (20) Tanaka, T; Biosci Biotech Biochem 1995, V59, P1389 HCAPLUS
- (21) Tokumura, A; Prog Lipid Res 1995, V34, P151 HCAPLUS
- (22) Valone, F; J Immunol 1982, V129, P1637 HCAPLUS
- (23) Vaskovsky, V; J Lipid Res 1968, V9, P396 MEDLINE
- (24) Volk, T; Mol Cell Biochem 1997, V171, P11 HCAPLUS
- (25) Watson, A; J Biol Chem 1997, V272, P13597 HCAPLUS
- (26) Yue, T; Prostaglandins 1990, V39, P469 HCAPLUS
- (27) Zimmermann, G; J Nutr 1995, V125, P1661S

IT 217322-89-9

RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); BIOL (Biological study)
 (stimulation of monocytes and platelets by short-chain
 phosphatidylcholines with and without terminal carboxyl group)

RN 217322-89-9 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxy-1-oxobutoxy)-4-
 hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L65 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:468162 HCAPLUS

DN 117:68162

ED Entered STN: 23 Aug 1992

TI Production and characterization of antibodies to platelet-activating factor

AU Macpherson, Janet L.; Spur, Bernt; Pyne, Stephen G.; Heymans, Francoise;
 Cox, Marlene F.; Godfroid, Jean Jaques; Krilis, Steven A.

CS Sch. Med., Univ. New South Wales, Kogarah, Australia

SO Journal of Lipid Mediators (1992), 5(1), 49-59

CODEN: JLMEEG; ISSN: 0921-8319

DT Journal

LA English

CC 15-3 (Immunochemistry)
 Section cross-reference(s): 9

AB Antibodies directed against platelet-activating factor (PAF) have been raised in rabbits immunized with a novel PAF-analog-conjugate. An analog of PAF with a C double bond at the terminal end of the alkyl chain was subjected to ozonolysis and converted to the aldehyde. The aldehyde was coupled to thyroglobulin by reductive alkylation and rabbits were immunized via either i.m. or intradermal routes in complete Freund's adjuvant. The antibodies are specific for PAF with a preference for the optically active (R)-enantiomer. There appears to be a requirement for antibody binding of ≤ 18 C alkyl at C1, and an acetyl group in the C2 position. The ability of a number of structural analogs to inhibit binding of tracer to the antibody is related to the biol. activity of the analog, and therefore may reflect the structural domains that are critical for PAF to interact with its receptors. An RIA was developed that is capable of detecting ≥ 0.3 pmol PAF/tube. Lyso-PAF does not interfere even at 25 $\mu\text{g/mL}$.

ST antibody platelet activating factor analog; RIA platelet activating factor; immunoassay platelet activating factor

IT Blood analysis
 (platelet-activating factor determination in, by RIA, antibodies for)

IT Antibodies
 RL: PREP (Preparation)
 (to platelet-activating factor, analog conjugate in preparation of)

IT Molecular structure-biological activity relationship
 (antibody cross-reacting, of platelet-activating factor analogs, blood platelet-aggregating activity in relation to)

IT Molecular structure-biological activity relationship
 (blood platelet-aggregating, of platelet-activating factor analogs, antibody cross-reactivity in relation to)

IT Thyroglobulins
 RL: PREP (Preparation)
 (conjugates, with platelet-activating factor analog, preparation of and antibodies to platelet-activating factor generation with)

IT 65154-06-5, Platelet-activating factor
 RL: PRP (Properties)
 (antibodies to and RIA for)

IT 52691-62-0 74389-68-7 74389-69-8 77286-66-9 77286-68-1
 80736-28-3 85733-91-1 90857-96-8 99885-04-8 126372-87-0
 137154-84-8 137253-29-3 142609-64-1 142609-65-2
 RL: PRP (Properties)
 (blood platelet-aggregating activity of and platelet-activating factor antibody cross-reactivity with)

IT 142609-66-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ozonolysis of)

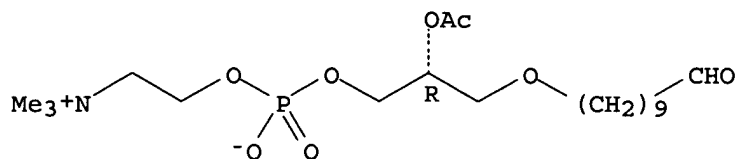
IT 142609-67-4DP, thyroglobulin conjugates
 RL: PREP (Preparation)
 (preparation of and antibodies to platelet-activating factor generation with)

✓ IT 142609-67-4DP, thyroglobulin conjugates *YK*
 RL: PREP (Preparation)
 (preparation of and antibodies to platelet-activating factor generation with)

RN 142609-67-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphanonadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-19-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:401100 HCAPLUS

DN 117:1100

ED Entered STN: 11 Jul 1992

TI Evaluation of synthetic novel ether aminophosphoglycerides for glucocorticoid-receptor complex modulator activity

AU Bodine, Peter V.; Garcia, M. Luisa; Pascual, J.; Bastida, E.; Carganico, Germano; Litwack, Gerald

CS Sch. Med., Temple Univ., Philadelphia, PA, 19140, USA

SO Receptor (1991), 1(3), 167-80

CODEN: RECEE5; ISSN: 1052-8040

DT Journal

LA English

CC 2-2 (Mammalian Hormones)

AB Modulator is an endogenous low-mol.-weight regulator of the glucocorticoid-receptor complex. Structural anal. of purified modulator suggested that it was a novel ether aminophosphoglyceride (Bodine, P. V.; Litwack, G., 1988). Analogs of the putative modulator structure have now been synthesized. The synthetic compds. are 1-O-(6-carboxylhexyl)-glycero-3-phosphoserine and the sn-2-methoxy and sn-1-ethyl ester derivs. Like modulator, these novel synthetic compds. are water soluble. However, TLC and spectroscopic anal. of these phosphoglycerides indicated significant structural differences between modulator and the synthetic analogs. In particular, the chromatog. behavior of the compds. suggests that modulator is more highly charged than the synthetic derivs. The synthetic compds., as well as lysophosphatidylserine, were also tested for in vitro modulator activity using the glucocorticoid-receptor complex activation inhibition and steroid-binding stabilization assays. None of the analogs exhibited modulator activity in these assays. However, the synthetic compds. were generally less detrimental to receptor steroid-binding than lysophosphatidylserine. Thus, although modulator is not mimicked by one of these synthetic phosphoglycerides, a starting point for future structure-function studies has nonetheless been established.

ST modulator ether aminophosphoglyceride glucocorticoid receptor; LM 1021 1023 1024 glucocorticoid receptor

IT Molecular structure-biological activity relationship
(glucocorticoid receptor complex-affecting, of ether aminophosphoglycerides)

IT Lysophosphatidylserines

RL: BIOL (Biological study)

(glucocorticoid receptor complexes modulation by)

IT Corticosteroids, compounds

RL: BIOL (Biological study)

(gluco-, receptors, complexes, ether aminophosphoglyceride modulators of, natural and synthetic analogs of, structure-activity relations of)

IT Receptors

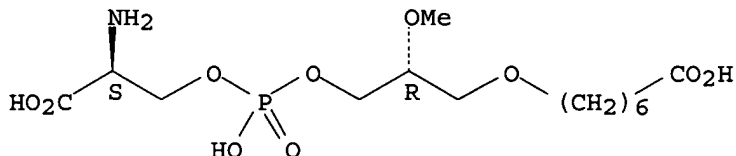
RL: BIOL (Biological study)

(glucocorticosteroid, complexes, ether aminophosphoglyceride modulators of, natural and synthetic analogs of, structure-activity relations of)

IT 139239-73-9 141650-21-7 141724-86-9 141724-87-0D, carboxyalkyl ethers

RL: BIOL (Biological study)
 (glucocorticoid receptor complexes modulation by)
 IT 141650-21-7
 RL: BIOL (Biological study)
 (glucocorticoid receptor complexes modulation by)
 RN 141650-21-7 HCAPLUS
 CN L-Serine, 3-[(6-carboxyhexyl)oxy]-2-methoxypropyl hydrogen phosphate
 (ester), (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:106720 HCAPLUS
 DN 116:106720
 ED Entered STN: 20 Mar 1992
 TI Synthesis of new ether glycerophospholipids structurally related to
 modulator
 AU Garcia, M. L.; Pascual, J.; Borrás, L.; Andreu, J. A.; Fos, E.; Mauleon,
 D.; Carganico, G.; Arcamone, F.
 CS Lab. Menarini S. A., Badalona, Spain
 SO Tetrahedron (1991), 47(48), 10023-34
 CODEN: TETRAB; ISSN: 0040-4020
 DT Journal
 LA English
 CC 34-2 (Amino Acids, Peptides, and Proteins)
 AB A series of new glycerophospholipids bearing a short-chain carboxylic acid
 in position sn-1 and phosphocholine or phosphoserine in position sn-3 of
 glycerol, have been prepared in good overall yields. 1-O-(6-Carboxyhexyl)-
 sn-glycero-3-phosphoserine, a strict analog of the structure proposed for
 the biol. modulator, has been synthesized in a stereoselective way from
 (R)-1,2-isopropylidene-glycerol.
 ST glycerophospholipid serine proline; modulator glycerophospholipid ether
 IT Phospholipids, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (glycero-, choline-containing, preparation of, as biol. modulator analog)
 IT Phospholipids, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (glycero-, serine-containing, preparation of, as biol. modulator analog)
 IT 138614-00-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (deisopropylidination of)
 IT 693-67-4, 1-Bromoundecane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (esterification by, of carboxyhexyl(methyl)glycerol)
 IT 4167-02-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (etherification of, with glycerol derivs.)
 IT 21209-51-8, N-Benzoyloxycarbonylserine benzyl ester
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (etherification of, with glycerophospholipids)
 IT 29823-18-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(etherification of, with isopropylidene glycerol)

IT 138594-35-1 139239-75-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(etherification of, with phosphorus trichloride and serine derivative,
phosphate diester from)

IT 138594-14-6P 138594-37-3P 138594-39-5P 139239-72-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and catalytic hydrogenolysis of)

IT 139141-19-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and deisopropylidenation of)

IT 138594-28-2P 139141-22-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and detritylation of)

IT 138594-34-0P 139141-18-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and esterification of, with benzyl chloride)

IT 139141-23-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and esterification of, with phosphorus trichloride, phosphite
ester from)

IT 139141-21-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and etherification of, with benzyl bromide)

IT 139141-17-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and saponification of)

IT 138594-38-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and selective deesterification of, with iodide)

IT 138594-18-0P 139141-20-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and tritylation of)

IT 138594-25-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and O-methylation of)

IT 138594-11-3P 138594-12-4P 138594-15-7P 139141-33-6P
139141-36-9P 139141-37-0P 139239-73-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 138594-33-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, condensation of, with bromoethyl phosphorodichloridate and
trimethylamine, and deblocking of)

IT 138594-24-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, condensation of, with dichlorophosphite and serine
derivative, and
oxidation of, phosphate triester from)

IT 138594-31-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, condensation of, with phosphorus trichloride and serine derivative, and oxidation of, phosphate diester from)

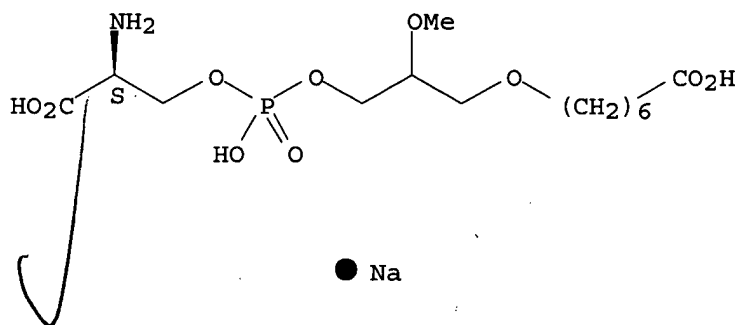
IT 139141-25-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, etherification of, with serine derivative and oxidation of, phosphate diester from)

IT 14347-78-5, (R)-1,2-Isopropylideneglycerol
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (O-alkylation of, with bromoheptanoate)

IT 138594-12-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 138594-12-4 HCAPLUS
 CN L-Serine, 3-[(6-carboxyhexyl)oxy]-2-methoxypropyl hydrogen phosphate (ester), monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:104015 HCAPLUS
 DN 116:104015
 ED Entered STN: 20 Mar 1992
 TI Synthesis of a PAF immunogen and production of PAF-specific antibodies
 AU Smal, Mary A.; Baldo, Brian A.; Redmond, John W.
 CS Kolling Inst. Med. Res., R. North Shore Hosp., St. Leonards, 2065, Australia
 SO Lipids (1991), 26(12), 1130-5
 CODEN: LPDSAP; ISSN: 0024-4201
 DT Journal
 LA English
 CC 15-3 (Immunochemistry)
 AB An immunoassay for platelet activating factor (PAF) would greatly improve its quantitation; for this, PAF-specific antibodies were required. Chemical-reactive analogs of PAF, containing an aldehyde group at the end of the 1-O-alkyl chain (hexyl or dodecyl), were synthesized from readily available materials. During the multi-step synthetic procedure, the aldehyde group was protected as an acetal, which was converted by mild acidic hydrolysis to the aldehyde immediately prior to protein coupling. These analogs were coupled to methylated bovine serum albumin and the resultant conjugates were injected into rabbits. Antibodies to PAF were detected using a solid phase RIA based on Protein A-Sepharose. The dodecyl PAF conjugate proved to be the more immunogenic conjugate, with more than half of the rabbits producing significant levels of antibodies (at least a 10-fold increase in radioactive uptake over pre-immune

levels). Results from solid phase immunoassays employing nitrocellulose disks impregnated with PAF, lysoPAF, lecithin, lysolecithin and 2-O-methyl-lysoPAF indicated that the antibodies recognized only PAF. PAF-specific antibodies were isolated by affinity chromatog. using a column of PAF-poly(lysine) conjugated to carboxy-activated polyacrylamide.

ST antibody platelet activating factor

IT Antibodies

RL: PREP (Preparation)

(to platelet-activating factor, preparation and reactivity of)

IT Albumins, compounds

RL: BIOL (Biological study)

(conjugates, with platelet-activating factor analogs, platelet-activating factor-specific antibodies induction by, after immunization)

IT 65154-06-5, Platelet-activating factor

RL: PRP (Properties)

(antibodies to, preparation of)

IT 119142-20-0P 123473-53-0DP, albumin conjugates

RL: PREP (Preparation)

(preparation and immunization with, platelet-activating factor-specific antibodies induction by)

IT 119142-20-0P 123473-53-0DP, albumin conjugates

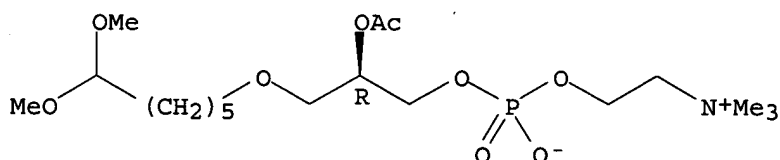
RL: PREP (Preparation)

(preparation and immunization with, platelet-activating factor-specific antibodies induction by)

RN 119142-20-0 HCAPLUS

CN 2,9,13,15-Tetraoxa-14-phosphaheptadecan-17-aminium, 11-(acetyloxy)-14-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 14-oxide, (R)- (9CI) (CA INDEX NAME)

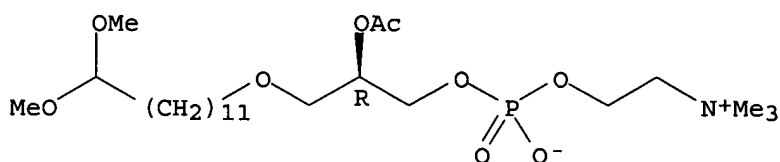
Absolute stereochemistry.



RN 123473-53-0 HCAPLUS

CN 2,15,19,21-Tetraoxa-20-phosphatricosan-23-aminium, 17-(acetyloxy)-20-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 20-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:59893 HCAPLUS

DN 116:59893

ED Entered STN: 21 Feb 1992

TI Preparation of new glycerophospholipids as drugs
 IN Arcamone, Federico M.; Carganico, Germano; Garcia Perez, M. Luisa; Fos
 PA Laboratorios Menarini S. A., Spain
 SO Span., 47 pp.
 CODEN: SPXXAD

DT Patent

LA Spanish

IC ICM C07F009-10

ICA A61K031-22

CC 33-3 (Carbohydrates)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ES 2019552	A6	19910616	ES 1990-1051	19900411 <--
PRAI	ES 1990-1051		19900411	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
ES 2019552	ICM	C07F009-10
	ICA	A61K031-22

OS MARPAT 116:59893

AB Title compds. R(CH₂)_nOCH₂CH(OR₁)CH₂OP(O)(O-)OCH₂CHR₃NR₃+, useful as antitumor agents, antiallergics, glucocorticoid regulators, antithrombotics, etc. (no data), are prepared by several similar methods. For example, alkylation of isopropylideneglycerol with Br(CH₂)₆CO₂Et and NaH (40%) and acid hydrolysis (90%) gave 1-O-(6-ethoxycarbonylhexyl)glycerol, which underwent 3-O-tritylation (84%), methylation with MeI and KH (96%), and detritylation with aqueous HCl-dioxane (70%) to give the 2-O-Me derivative. Condensation of the latter with MeOPCl₂ and benzyl(N-carbobenzyloxy)serine followed by H₂O₂ oxidation (38%), demethylation of the resultant Me phosphoserine derivative with NaI (72%), and final hydrogenolysis (71%) gave 1-O-(6-ethoxycarbonylhexyl)-2-O-methylglycero-3-phosphoserine.

ST glycerophospholipid prepn antitumor antiallergic antithrombotic;
 antiinflammatory glycerophospholipid prepn; glucocorticoid regulator
 glycerophospholipid prepn; phospholipid glycerol prepn drug

IT Allergy inhibitors
 Anticoagulants and Antithrombotics
 Antihypertensives
 Inflammation inhibitors
 Neoplasm inhibitors
 (glycerophospholipids)

IT Anaphylaxis
 (treatment of, glycerophospholipids for)

IT Heart, disease
 (angina pectoris, treatment of, glycerophospholipids for)

IT Bronchodilators
 (antiasthmatics, glycerophospholipids)

IT Corticosteroids, biological studies
 RL: BIOL (Biological study)
 (gluco-, regulators of, glycerophospholipids as)

IT Phospholipids, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (glycero-, preparation of, as drugs)

IT	138594-18-0P	138594-19-1P	138594-20-4P	138594-21-5P	138594-22-6P
	138594-23-7P	138594-24-8P	138594-25-9P	138594-26-0P	138594-27-1P
	138594-28-2P	138594-29-3P	138594-30-6P	138594-31-7P	138594-32-8P
	138594-33-9P	138594-34-0P	138594-35-1P	138594-36-2P	138594-37-3P

138594-38-4P 138594-39-5P 138594-41-9P 138594-43-1P 138594-44-2P
138594-45-3P 138594-46-4P 138614-00-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of glycerophospholipid drugs)

IT 138594-11-3P 138594-12-4P 138594-13-5P 138594-14-6P

138594-15-7P 138594-16-8P 138594-17-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(preparation of, as drug)

IT 75-50-3, Trimethylamine, reactions 76-83-5, Trityl chloride 100-39-0,

Benzyl bromide 100-44-7, Benzyl chloride, reactions 100-51-6, Benzyl

alcohol, reactions 100-79-8, Isopropylidenglycerol 629-03-8,

1,6-Dibromohexane 693-67-4, 1-Bromoundecane 3279-26-3, Methyl

dichlorophosphite 4167-02-6, 2-Bromoethyl dichlorophosphate 6609-64-9

7719-12-2, Phosphorus trichloride 21209-51-8 29823-18-5, Ethyl

7-bromoheptanoate

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of glycerophospholipid drugs)

IT 138594-12-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL

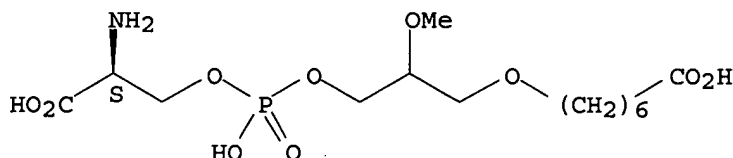
(Biological study); PREP (Preparation); USES (Uses)

(preparation of, as drug)

RN 138594-12-4 HCAPLUS

CN L-Serine, 3-[(6-carboxyhexyl)oxy]-2-methoxypropyl hydrogen phosphate (ester), monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Na

L65 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:39343 HCAPLUS

DN 116:39343

ED Entered STN: 08 Feb 1992

TI Antibodies to synthetic platelet-activating factor (1-O-alkyl-2-O-acetyl-sn-glycero-3-phosphocholine) analogs with substituents at the sn-2 position

AU Karasawa, Ken; Satoh, Noriko; Masuda, Megumi; Setaka, Morio; Hashimoto, Kikuo; Ishibashi, Kaichiro; Nojima, Shoshichi

CS Fac. Pharm. Sci., Teikyo Univ., Sagamiko, 199-01, Japan

SO Journal of Biochemistry (Tokyo, Japan) (1991), 110(5), 683-7

CODEN: JOBIAO; ISSN: 0021-924X

DT Journal

LA English

CC 15-3 (Immunochemistry)

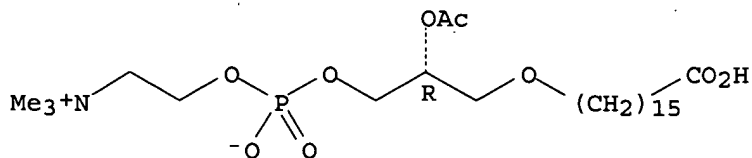
AB The authors obtained rabbit antibodies by injecting immunogenic conjugates which were prepared by combining covalently 1-O-(15'-carboxypentadecyl)-2-O-acetyl-sn-glycero-3-phosphocholine (acetyl-CPGPC), 1-O-(15'-

carboxypentadecyl)-2-O-N,N-dimethylcarbamoyl-sn-glycero-3-phosphocholine (dimethylcarbamoyl-CPGPC), or 1-O-(15'-carboxypentadecyl)-2-O-N-butylcarbamoyl-sn-glycero-3-phosphocholine (butylcarbamoyl-CPGPC) with protein (BSA or KLH), resp., and examined the specificity of the resulting antibodies by comparison with inhibition of the binding of iodolabeled CPGPC derivs. to the antibodies by corresponding or related phospholipids. Acetyl-CPGPC and dimethylcarbamoyl-CPGPC possessed haptenic activity causing production of antibodies reactive with PAF. Changes of the substituents at sn-2 in the antigens affected the specificity of the resulting antibodies. The affinity of the substituents to the antibodies decreased in the following order: acetyl » dimethylcarbamoyl and butylcarbamoyl for antibodies to acetyl-CPGPC-KLH; dimethylcarbamoyl » acetyl » butylcarbamoyl for antibodies to dimethylcarbamoyl-CPGPC-BSA; and butylcarbamoyl » dimethylcarbamoyl » acetyl for antibodies to butylcarbamoyl-CPGPC-BSA. Naturally occurring phospholipids, including lysoPAF, phosphatidylcholine, lysophosphatidylcholine, and sphingomyelin, revealed no cross-reactivities with these antibodies.

Anti-dimethylcarbamoyl-CPGPC-BSA IgG and anti-acetyl-CPGPC-KLH IgG inhibited a PAF-induced aggregation of washed rabbit platelets in a dose-dependent manner. In contrast, anti-butylcarbamoyl-CPGPC-BSA IgG did not affect a PAF-induced platelet aggregation, nor did preimmune IgG.

- ST antibody platelet activating factor analog structure
 IT Molecular structure-biological activity relationship
 (immunogenicity, of synthetic platelet-activating factors)
 IT Antibodies
 RL: PREP (Preparation)
 (to synthetic platelet-activating factor, preparation and reactivity of, structure in relation to)
 IT 129879-41-0D, protein conjugates 130126-32-8D, protein conjugates 138219-59-7D, protein conjugates 138219-60-0
 RL: PRP (Properties)
 (antibodies to, preparation and reactivity of, platelet-activating factor structure in relation to)
 IT 65154-06-5, Blood platelet-activating factor
 RL: PRP (Properties)
 (antibodies to, preparation and reactivity of, structure in relation to)
 IT 129879-41-0D, protein conjugates
 RL: PRP (Properties)
 (antibodies to, preparation and reactivity of, platelet-activating factor structure in relation to)
 RN 129879-41-0 HCAPLUS
 CN 3,5,9-Trioxa-4-phosphatetracosan-1-aminium, 7-(acetyloxy)-24-carboxy-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- L65 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:99515 HCAPLUS
 DN 114:99515
 ED Entered STN: 23 Mar 1991
 TI The specificity of the binding of platelet activating factor (PAF) to

anti-PAF antibodies

AU Smal, Mary A.; Baldo, Brian A.; Harle, David G.

CS Kolling Inst. Med. Res., R. North Shore Hosp., St. Leonards, 2065, Australia

SO Journal of Molecular Recognition (1990), 3(4), 169-73
CODEN: JMORE4; ISSN: 0952-3499

DT Journal

LA English

CC 15-2 (Immunochemistry)

AB Quant. hapten inhibition expts. employing sheep anti-PAF antibodies and selected PAF analogs were undertaken with the aim of defining the antigenic determinant structures complementary to the antibody combining sites. The most important fine structural features for inhibition of antibody binding to PAF were shown to be an acetyl group at position 2 of the phospholipid glycerol backbone and an ether group at position 1. Of the naturally occurring compds., C16- and C18:1-PAF proved to be the most potent inhibitors and more active than C18-PAF while phospholipids with a propionyl, butyryl or hexanoyl group at position 2 showed either weak or no inhibitory activity. The 1-acyl, thioether and deoxy analogs proved inactive. Variations in the polar head group of PAF were found to be less critical with, for example, the di-Me and ethanolamine derivs. retaining some activity. This antibody recognition pattern is very similar to that of the PAF receptor, although the antibodies appear to have a more specific requirement for an acyl linkage at position 2.

ST platelet activating factor antigenic site structure

IT Antigens
RL: BIOL (Biological study)
(determinants, of platelet-activating factor and analogs, structure in relation to)

IT Antibodies
RL: BIOL (Biological study)
(to platelet-activating factor, antigenic determinants in, structure in relation to)

IT Phosphatidylethanolamines
RL: BIOL (Biological study)
(2-Ac, alkyl analogs, platelet-activating factor binding to antibodies inhibition by, antigenic determinants and structure in relation to)

IT Molecular structure-biological activity relationship
(antigenic, of platelet-activating factor and analogs)

IT 65154-06-5, Platelet-activating factor
RL: BIOL (Biological study)
(antigenic determinants of, structure in relation to)

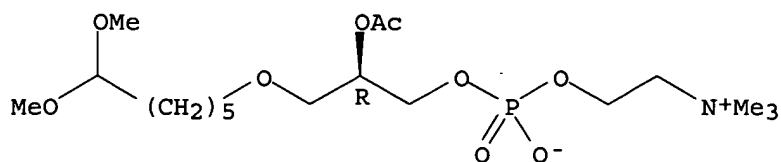
IT 52691-62-0 74389-68-7 74389-69-8 77286-68-1 78858-44-3
79512-78-0 81524-52-9 82936-54-7 83526-66-3 83526-67-4
85353-13-5 85966-90-1 89314-81-8 90857-75-3 91575-58-5
99103-16-9, U66985 99103-18-1, U66982 119142-20-0
123473-53-0 132309-68-3
RL: BIOL (Biological study)
(platelet-activating factor binding to antibodies inhibition by, antigenic determinants and structure in relation to)

IT 119142-20-0 123473-53-0
RL: BIOL (Biological study)
(platelet-activating factor binding to antibodies inhibition by, antigenic determinants and structure in relation to)

RN 119142-20-0 HCAPLUS

CN 2,9,13,15-Tetraoxa-14-phosphaheptadecan-17-aminium, 11-(acetyloxy)-14-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 14-oxide, (R)- (9CI) (CA INDEX NAME)

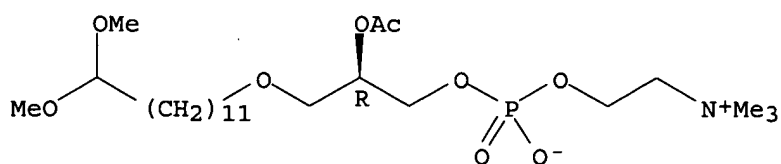
Absolute stereochemistry.



RN 123473-53-0 HCAPLUS

CN 2,15,19,21-Tetraoxa-20-phosphatricosan-23-aminium, 17-(acetyloxy)-20-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 20-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:40661 HCAPLUS

DN 114:40661

ED Entered STN: 09 Feb 1991

TI A facile synthesis of an aldehydic analog of platelet activating factor and its use in the production of specific antibodies

AU Wang, Chang Jin; Tai, Hsin Hsiung

CS Coll. Pharm., Univ. Kentucky, Lexington, KY, 40536-0082, USA

SO Chemistry and Physics of Lipids (1990), 55(3), 265-73

CODEN: CPLIA4; ISSN: 0009-3084

DT Journal

LA English

CC 15-3 (Immunochemistry)

Section cross-reference(s): 9, 26

AB The multistep synthesis of a platelet activating factor (PAF) analog [Me3N+(CH2)20P(O)(O-)OCH2CH(OAc)CH2O(CH2)8CHO] having a reactive aldehyde group at the ω-end of the sn-1 position is described. A novel ozonolysis of a double bond was employed to generate the aldehyde group in high yield under mild conditions. The aldehyde group was generated at the last step of the synthesis to avoid any reactions of protection and deprotection. The natural chiral center at the sn-2 position was introduced at the first step so that no steric resolution of the final product was needed. This analog of PAF was conjugated to thyroglobulin via reductive amination and then used to immunize rabbits for production of specific antibodies. The purified antibodies bind stereospecifically to tritiated PAF and crossreact minimally with lyso-PAF, plasmalogens and other phospholipids. The solid-phase RIA thus developed detects as low as 20 pg of PAF per assay tube and should be applicable to the quantitation of PAF in biol. systems.

ST platelet activation factor analog prepn; aldehyde platelet activating factor; antibody platelet activating factor analog

IT Antibodies

RL: PREP (Preparation)

(platelet activating factor aldehyde analog preparation for production of specific, in RIA)

IT Immunochemical analysis
(radioimmunoassay, platelet activating factor aldehyde analog preparation for production of specific antibodies in)

IT Thyroglobulins
RL: PREP (Preparation)
(reaction products, with platelet activating factor aldehyde analog, preparation of, for production of specific antibodies for RIA)

IT 13019-22-2, 9-Decen-1-ol
RL: RCT (Reactant); RACT (Reactant or reagent)
(mesylation of)

IT 4167-02-6
RL: BIOL (Biological study)
(phosphorylation by, of decenyl glycerol derivative)

IT 131418-00-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)

IT 131442-31-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and deetherification of)

IT 131417-98-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and detritylation of)

IT 131417-97-5P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and etherification of, with methoxyethoxymethyl chloride)

IT 131418-01-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ozonolysis of)

IT 131442-30-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and phosphorylation of, with bromoethylphosphoryl dichloride)

IT 114640-35-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with dimethyldioxolane methanol)

IT 131417-99-7P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and substitution reaction of, with trimethylamine)

IT 131417-96-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and tritylation of)

IT **131418-02-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 65154-06-5DP, Platelet activating factor, aldehyde analogs
RL: PREP (Preparation)
(preparation of, for production of specific antibodies in RIA)

IT **131418-02-5DP**, reaction products with thyroglobulins
RL: PREP (Preparation)
(preparation of, in production of specific antibodies for RIA)

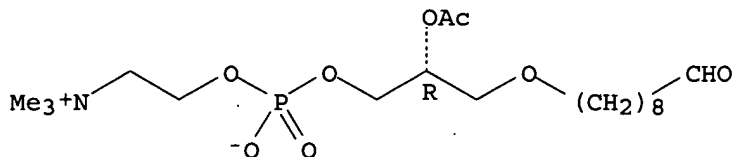
IT 14347-78-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with mesyloxydecene)

IT **131418-02-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 131418-02-5 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaoctadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-18-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 131418-02-5DP, reaction products with thyroglobulins

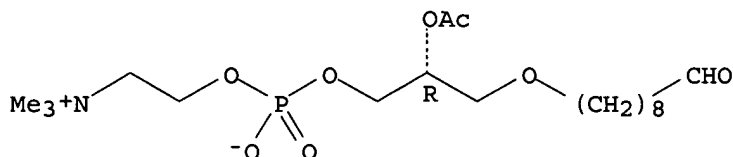
RL: PREP (Preparation)

(preparation of, in production of specific antibodies for RIA)

RN 131418-02-5 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaoctadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-18-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:572541 HCAPLUS

DN 113:172541

ED Entered STN: 09 Nov 1990

TI Synthesis of 1-O-(15-carboxypentadecyl)-2-O-acetyl-sn-glycero-3-phosphorylcholine as a potential platelet activating factor (PAF) hapten

AU Prashad, Mahavir; Tomesch, John C.; Wareing, James R.

CS Sandoz Res. Inst., East Hanover, NJ, 07936, USA

SO Chemistry and Physics of Lipids (1990), 53(1), 121-6

CODEN: CPLIA4; ISSN: 0009-3084

DT Journal

LA English

CC 33-6 (Carbohydrates)

AB The title compound was prepared from MeSO₃(CH₂)₆CH:CH(CH₂)₇CO₂H and 2,3-isopropylidene-L-glycerol in 7 steps.

ST carboxypentadecylglycerophosphocholine; glycerophosphocholine carboxypentadecyl

IT 93107-75-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(ester hydrolysis of)

IT 129879-39-6P

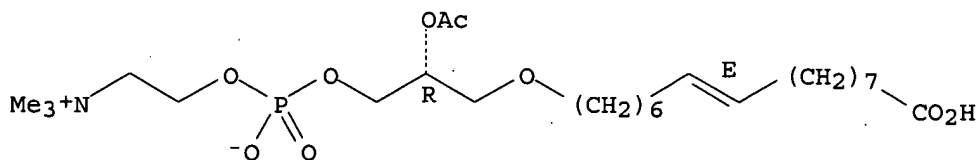
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)

IT 129879-38-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ester hydrolysis of)

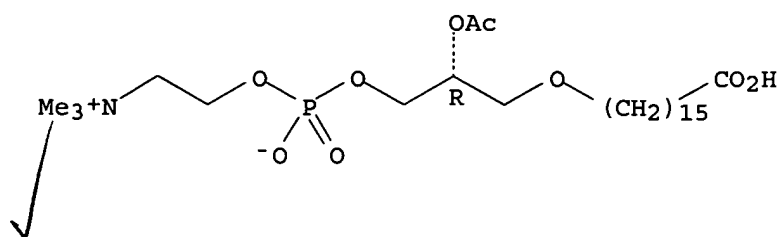
- IT 129879-37-4P 129879-69-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with choline tosylate)
- IT 129879-35-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with with isopropylideneglycerol)
- IT 129879-40-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reduction of)
- IT 129902-68-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and silylation of)
- IT 129879-36-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and tetrahydropyranylation of)
- IT 74389-68-7DP, Platelet activating factor, analogs 129879-41-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
- IT 14347-78-5, 2,3-Isopropylidene-L-glycerol
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with mesyloxyhexadecanoic acid)
- IT 55357-38-5, Choline tosylate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with methoxycarbonylpentadecylglycerol)
- IT 129879-40-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reduction of)
- RN 129879-40-9 HCAPLUS
- CN 3,5,9-Trioxa-4-phosphatetracos-16-en-1-aminium, 7-(acetyloxy)-24-carboxy-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, [R-(E)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



- IT 129879-41-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
- RN 129879-41-0 HCAPLUS
- CN 3,5,9-Trioxa-4-phosphatetracosan-1-aminium, 7-(acetyloxy)-24-carboxy-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

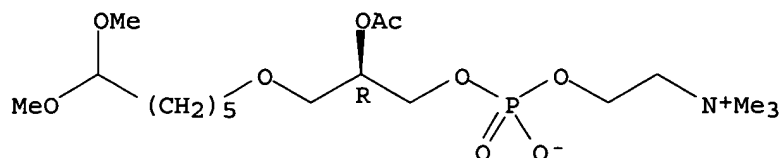
Absolute stereochemistry.



L65 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:570033 HCAPLUS
 DN 113:170033
 ED Entered STN: 09 Nov 1990
 TI Combining site specificities of rabbit antibodies to platelet-activating factor (PAF)
 AU Cooney, S. J.; Smal, M. A.; Harle, D. G.; Baldo, B. A.
 CS Kolling Inst. Med. Res., R. North Shore Hosp. Sydney, St. Leonards, 2065, Australia
 SO Molecular Immunology (1990), 27(5), 405-12
 CODEN: MOIMD5; ISSN: 0161-5890
 DT Journal
 LA English
 CC 15-3 (Immunochemistry)
 AB Anti-PAF sera from 6 different rabbits, immunized with C12- or C6-PAF as immunogen, were examined in hapten inhibition expts. in an attempt to define the fine structural recognition specificities of the antibody combining sites. Using a selection of naturally occurring lipids and PAF analogs, no significant cross-reactivity was observed with the lipids or with the inactive metabolite, lyso-PAF. Comparison of the structural specificity requirements of the antibodies from each rabbit showed some heterogeneity, with one antiserum demonstrating a different recognition specificity at position 1 on the glycerol backbone of the PAF mol. A second rabbit antiserum showed a large degree of tolerance for analogs with increasing acyl chain length at position 2. In general, an ether group at position 1 and an acetyl at position 2 were required for inhibitory activity and a degree of tolerance was demonstrated at position 3, where the main structural requirement was for one or more Me groups on the nitrogen atom of the phosphocholine moiety.
 ST platelet activating factor antibody binding site
 IT Antibodies
 RL: BIOL (Biological study)
 (to platelet-activating factor, combining site specificities of)
 IT Molecular structure-biological activity relationship
 (antibody-binding, by platelet-activating factor analogs)
 IT 74389-68-7 74389-69-8 77286-68-1 79549-26-1 79637-90-4
 81524-52-9 83526-66-3 83526-67-4 85353-13-5 85966-90-1
 99103-16-9, U66985 99103-18-1 108266-92-8 119142-20-0
 123473-53-0 129939-74-8
 RL: BIOL (Biological study)
 (antibodies binding to platelet-activating factor inhibition by)
 IT 65154-06-5, Platelet-activating factor
 RL: BIOL (Biological study)
 (antibodies to, combining site specificities of)
 IT 119142-20-0 123473-53-0
 RL: BIOL (Biological study)
 (antibodies binding to platelet-activating factor inhibition by)
 RN 119142-20-0 HCAPLUS
 CN 2,9,13,15-Tetraoxa-14-phosphaheptadecan-17-aminium, 11-(acetyloxy)-14-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 14-oxide, (R)- (9CI) (CA

INDEX NAME)

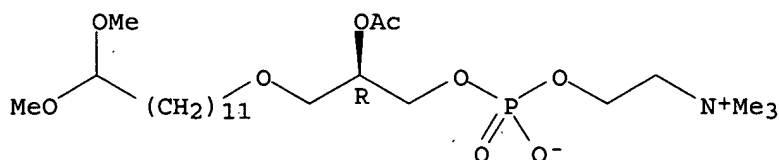
Absolute stereochemistry.



RN 123473-53-0 HCAPLUS

CN 2,15,19,21-Tetraoxa-20-phosphatricosan-23-aminium, 17-(acetyloxy)-20-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 20-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:158831 HCAPLUS

DN 112:158831

ED Entered STN: 28 Apr 1990

TI Phospholipids as immunostimulants

IN Nakamura, Tetsuya; Sawada, Hideo; Nakayama, Masaharu

PA Nippon Oils & Fats Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C07F009-10

ICS C07F009-09

ICA A61K031-685

CC 33-6 (Carbohydrates)

Section cross-reference(s): 1

FAN.CNT 1

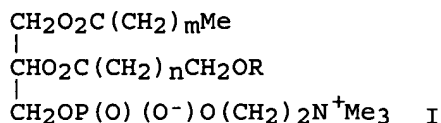
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01258691	A2	19891016	JP 1988-83136	19880406 <--
PRAI JP 1988-83136		19880406	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 01258691	ICM	C07F009-10
	ICS	C07F009-09
	ICA	A61K031-685

OS MARPAT 112:158831

GI



- AB Phospholipids I (R = H, tetrahydropyran-2-yl; m, n = 1-22) useful as immunostimulants (no data), are prepared Treatment of 3.50 g 9-(tetrahydro-2H-pyran-2-yloxy)nonanoic acid (preparation given) with 2.81 g DCC in CCl₄ at room temperature for 15 h gave 2.48 g corresponding anhydride, which was treated with 1-octadecanoyl-3-glycerophosphorylcholine and 4-dimethylaminopyridine in DMSO at 50° for 7.5 h to afford 86.5% I (R = tetrahydro-2H-pyran-2-yl, m = 16, n = 7) (II). Treatment of II with 85% aqueous AcOH at 40° for 3 h gave 57.8% I (R = H, m = 16, n = 7).
- ST phospholipid prepn immunostimulant
- IT Hydrolysis
(of (tetrahydropyranyloxy)fatty acid-acylated glycerophosphorylcholines, in preparation of immunostimulant phospholipids)
- IT Esterification
(of monoacylglycerophosphorylcholines, with (tetrahydropyranyloxy)fatty acid anhydrides, in preparation of immunostimulant phospholipids)
- IT Immunostimulants
(phospholipids)
- IT Phospholipids, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as immunostimulants)
- IT 4547-43-7 34957-73-8, Methyl 9-hydroxynonanoate 71655-36-2, Methyl 12-hydroxydodecanoate
RL: PROC (Process)
(addition of, with dihydropyran)
- IT 110-87-2, 3,4-Dihydro-2H-pyran
RL: PROC (Process)
(addition of, with hydroxyfatty acid esters)
- IT 3476-42-4, 1-Dodecanoyl-3-glycerophosphorylcholine 13757-83-0, 1-Decanoyl-3-glycerophosphorylcholine 17364-18-0, 1-Hexadecanoyl-3-glycerophosphorylcholine 17364-19-1, 1-Octadecanoyl-3-glycerophosphorylcholine
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification of, with (tetrahydropyranyloxy)fatty acid anhydride)
- IT 126048-10-0P, 9-[(Tetrahydro-2H-pyran-2-yl)oxy]nonanoic anhydride
126048-11-1P, 6-[(Tetrahydro-2H-pyran-2-yl)oxy]hexanoic anhydride
126048-12-2P, 12-[(Tetrahydro-2H-pyran-2-yl)oxy]dodecanoic anhydride
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification of, with monoacylglycerophosphorylcholine)
- IT 75949-34-7P, Methyl 9-[(tetrahydro-2H-pyran-2-yl)oxy]nonanoate
126048-07-5P, Methyl 6-[(tetrahydro-2H-pyran-2-yl)oxy]hexanoate
126048-08-6P, Methyl 12-[(tetrahydro-2H-pyran-2-yl)oxy]dodecanoate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
- IT 32437-88-0P, 6-[(Tetrahydro-2H-pyran-2-yl)oxy]hexanoic acid 116405-88-0P
126048-09-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, anhydride from)
- IT 126048-13-3P 126048-14-4P 126048-15-5P 126048-16-6P 126048-17-7P
126069-43-0P

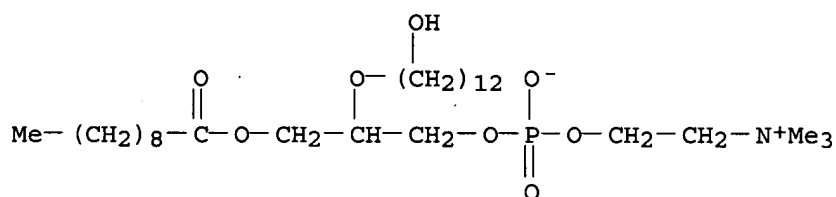
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation)
(preparation of, as immunostimulant)

IT 126069-43-0P

RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation)
(preparation of, as immunostimulant)

RN 126069-43-0 HCAPLUS

CN 3,5,8-Trioxa-4-phosphaeicosan-1-aminium, 4,20-dihydroxy-N,N,N-trimethyl-7-
[[[(1-oxodecyl)oxy]methyl]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L65 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:77856 HCAPLUS

DN 112:77856

ED Entered STN: 03 Mar 1990

TI Preparation of carboxyacylglycerosulfates and -phosphates as phospholipase
substrates

IN Junius, Martina; Neumann, Ulrich; Von der Eltz, Herbert

PA Boehringer Mannheim G.m.b.H., Fed. Rep. Ger.

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM C07F009-10

ICS C07C141-00; C12Q001-34

CC 33-6 (Carbohydrates)

Section cross-reference(s): 7

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 331167	A2	19890906	EP 1989-103660	19890302 <--
	EP 331167	A3	19891115		
	EP 331167	B1	19920722		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DE 3807123	A1	19890914	DE 1988-3807123	19880304 <--
	CA 1337656	A1	19951128	CA 1989-590628	19890209 <--
	JP 02003662	A2	19900109	JP 1989-46717	19890301 <--
	JP 04066864	B4	19921026		
	AU 8930943	A1	19890907	AU 1989-30943	19890302 <--
	AU 600869	B2	19900823		
	ZA 8901607	A	19891129	ZA 1989-1607	19890302 <--
	US 5091527	A	19920225	US 1989-318075	19890302 <--
	AT 78484	E	19920815	AT 1989-103660	19890302 <--
	ES 2034437	T3	19930401	ES 1989-103660	19890302 <--
PRAI	DE 1988-3807123	A	19880304	<--	
	EP 1989-103660	A	19890302	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 331167	ICM	C07F009-10
	ICS	C07C141-00; C12Q001-34
US 5091527	NCL	544/102.000; 548/414.000; 548/484.000; 549/005.000; 549/007.000; 549/011.000; 549/033.000; 558/032.000; 558/169.000; 558/180.000

OS CASREACT 112:77856; MARPAT 112:77856

AB (RYCH2)(ZCH2)CHY1COACOX and [RYCH](ZCH2)CH2Y1COACOX [A = C1-16 alkylene, alkenylene; R = H, C1-20 alkyl, alkenyl, acyl, (alkyl-substituted) aryl, aralkyl; R1 = H, alkylamino; X = aryloxy, arylthio; Y, Y1 = O, S; Z = SO3-, P(:O)(O-)OR1], useful as substrates for determination of phospholipases, were prepared. Thus, a mixture of 1-O-octadecyl-sn-glycero-3-phosphocholine, glutaric anhydride, and 4-dimethylaminopyridine was stirred 70 h in pyridine at 50° to give 1-O-octadecyl-2-(4-carboxybutyryl)-sn-glycero-3-phosphocholine. The latter in H2O/THF was stirred 40 h with 4-O2NC6H4OH and N-ethyl-N'-dimethylaminopropyl carbodiimide at 60° to give 1-O-octadecyl-2-[4-(4-nitrophenoxy)carbonylbutyryl]-sn-glycero-3-phosphocholine.

ST phospholipase detn carboxyacylglycerosulfate; phosphocholine carboxyacyl prepn phospholipase detn

IT 100-02-7, p-Nitrophenol, reactions 99847-08-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with carboxybutyloctadecylglycerophosphocholine, in preparation of phospholipase substrate)

IT 17677-16-6, 1-O-Dodecyl-3-O-tritylglycerine 74430-89-0 82002-20-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with glutaric anhydride, in preparation of phospholipase substrate)

IT 108-55-4, Glutaric anhydride
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with octadecylglycerophosphocholine, in preparation of phospholipase substrate)

IT 73430-11-2, Mono-p-nitrophenyl adipate
RL: PROC (Process)
(conversion of, to anhydride, in preparation of phospholipase substrate)

IT 125001-84-5P 125001-85-6P 125001-86-7P 125001-87-8P
125001-88-9P 125001-89-0P 125001-90-3P 125001-91-4P 125001-92-5P
125001-93-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for phospholipase substrate)

IT 125001-79-8P 125001-80-1P 125001-81-2P 125001-82-3P 125001-83-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as substrate for determination of phospholipases)

IT 9013-93-8, Phospholipase
RL: RCT (Reactant); RACT (Reactant or reagent)
(substrates, carboxyacylglycerosulfates and -phosphates)

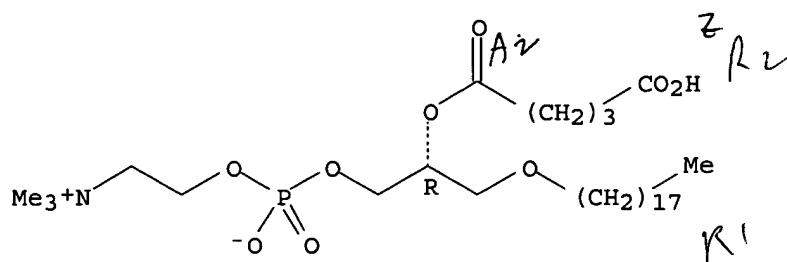
IT 125001-94-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(sulfation of, in preparation of phospholipase substrate)

IT 125001-84-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for phospholipase substrate)

RN 125001-84-5 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 7-(4-carboxy-1-oxobutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1989:592750 HCAPLUS

DN 111:192750

ED Entered STN: 25 Nov 1989

TI	Production of antibodies to platelet activating factor
----	--

AU Smal, Mary A.; Baldo, Brian A.; Redmond, John W.

CS Kolling Inst. Med. Res., R. North Shore Hosp., St. Leonards, 2065,
Australia

SO Molecular Immunology (1989), 26(8), 711-19

CODEN: MOIMD5; ISSN: 0161-5890

DT Journal

LA English

CC 15-3 (Immunochemistry)

Section cross-reference(s) : 9

AB Elucidation of the pathophysiol. role of platelet activating factor (PAF) in health and disease is currently hampered by the lack of a sensitive, reproducible and easily applied assay for this potent phospholipid. This study describes the preparation of PAF in an immunogenic form, the production of

antibodies to PAF and their use in the development of a preliminary RIA for PAF. Antibodies formed in response to a synthetic PAF analog coupled to a protein carrier were detected with 2 types of solid phases; PAF non-covalently adsorbed onto nitrocellulose and the PAF analog covalently linked to polyacrylamide. The latter was also used as a support for the isolation of anti-PAF antibodies by affinity chromatog. Quant. hapten inhibition studies showed that the antibody combining sites were complementary to PAF and that cross-reactivity to lyso-PAF and some related phospholipids was negligible. Using these antibodies, [^3H]PAF and Protein A-Sepharose as a means of separating bound and free tracer, the feasibility of developing a quant. RIA for PAF was demonstrated.

ST antibody platelet activating factor

IT Body fluid

(platelet-activating factor determination in, by RIA, monoclonal antibodies for)

IT Antibodies

RL: PREP (Preparation)

(to platelet-activating factor, preparation and use in RIA of)

IT Albumins, compounds

RL: PREP (Preparation)

(conjugates, with acetylbenzyl dimethoxyhexyl glycerols, preparation and platelet-activating factor-specific antibodies induction by)

IT 65154-06-5, Blood platelet-activating factor 65154-06-5D,

Platelet-activating factor, analogs

RL: BIOL (Biological study)

(antibodies to, preparation and use in RIA of)

IT 119142-20-0P 123473-53-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and hydrolysis of)

IT 25104-18-1DP, acetylbenzyltrimethoxyhexyl glycerol conjugates

38000-06-5DP, acetylbenzyltrimethoxyhexyl glycerol conjugates

119142-21-1DP, albumin and poly(Lys) conjugates

123473-54-1DP, albumin and poly(Lys) conjugates

RL: PREP (Preparation)

(preparation and platelet-activating factor-specific antibodies induction by)

IT 119142-18-6P 123473-52-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with choline toluenesulfonate of)

IT 119142-21-1P 123473-54-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with proteins of)

IT 55357-38-5, Choline p-toluenesulfonate

RL: BIOL (Biological study)

(reaction with acetylbenzyltrimethoxyhexyl glycerol analogs)

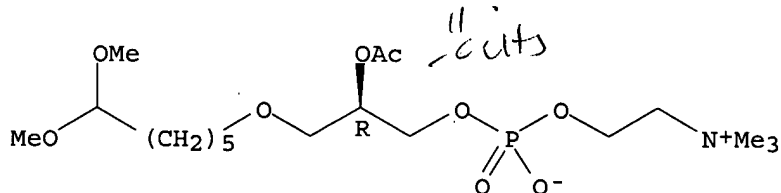
IT 119142-20-0P 123473-53-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrolysis of)

RN 119142-20-0 HCAPLUS

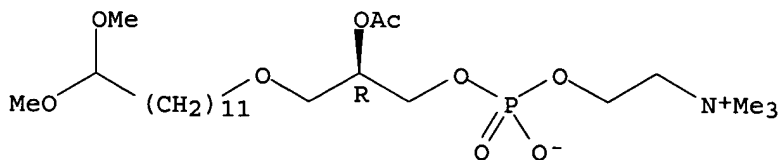
CN 2,9,13,15-Tetraoxa-14-phosphaheptadecan-17-aminium, 11-(acetyloxy)-14-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 14-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. γ 

RN 123473-53-0 HCAPLUS

CN 2,15,19,21-Tetraoxa-20-phosphatricosan-23-aminium, 17-(acetyloxy)-20-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 20-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 119142-21-1DP, albumin and poly(Lys) conjugates

123473-54-1DP, albumin and poly(Lys) conjugates

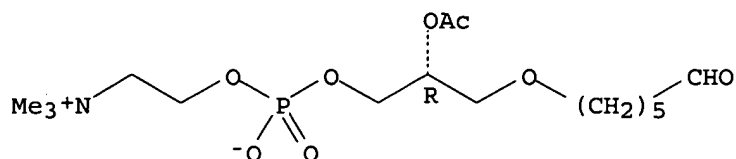
RL: PREP (Preparation)

(preparation and platelet-activating factor-specific antibodies induction by)

RN 119142-21-1 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-15-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

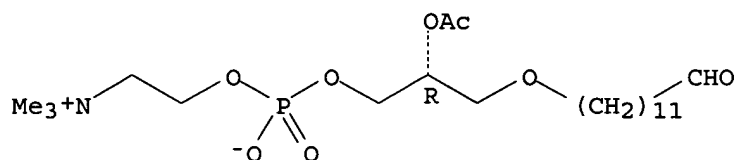
Absolute stereochemistry.



RN 123473-54-1 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheneicosan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-21-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



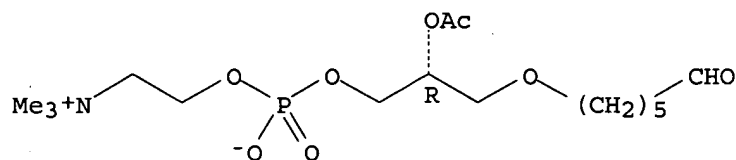
IT 119142-21-1P 123473-54-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with proteins of)

RN 119142-21-1 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-15-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

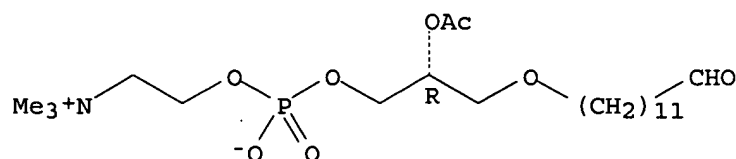
Absolute stereochemistry.



RN 123473-54-1 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheneicosan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-21-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L65 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1989:91686 HCAPLUS
 DN 110:91686
 ED Entered STN: 17 Mar 1989
 TI Antigenic analogs of platelet-activating factor (PAF), production of the analogs and antibodies to them, and PAF immunoassays
 IN Baldo, Brian Angelo; Redmond, John William
 PA University of Sydney, Australia; Macquarie University; Royal North Shore Hospital
 SO PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DT **Patent**
 LA English
 IC ICM C07F009-10
 ICS G01N033-92; C07K015-12
 CC 9-10 (Biochemical Methods)
 Section cross-reference(s): 7, 23, 29

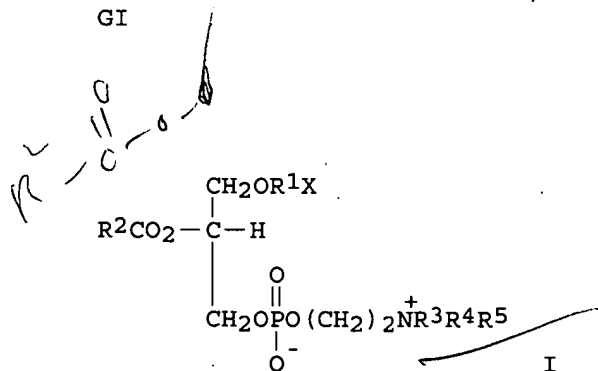
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8705904	A1	19871008	WO 1987-AU84	19870324 <--
	W: AU, JP, KR, US				
	RW: DE, FR, GB, IT				
	AU 8772097	A1	19871020	AU 1987-72097	19870324 <--
	AU 607698	B2	19910314		
	EP 299965	A1	19890125	EP 1987-902318	19870324 <--
	R: DE, FR, GB, IT				
	JP 01502584	T2	19890907	JP 1987-502157	19870324 <--
	IL 82057	A1	19941111	IL 1987-82057	19870331 <--
	US 5061626	A	19911029	US 1987-156923	19871124 <--
PRAI	AU 1986-5175	A	19860324	<--	
	WO 1987-AU84	A	19870324	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 8705904	ICM	C07F009-10
	ICS	G01N033-92; C07K015-12
US 5061626	NCL	435/174.000; 435/192.000; 435/199.000; 435/207.000; 436/545.000; 436/546.000; 530/345.000; 530/402.000; 530/403.000; 530/404.000; 530/406.000; 530/408.000; 530/409.000; 530/410.000; 554/080.000; 558/169.000; 558/172.000 <--

GI



AB PAF analogs I [R¹ = C2-25 alkylene or alkenylene linking group substituted by radioactive I and X = H; or R¹ = C2-25 alkylene, alkenylene,

alkynylene, optionally 3H- or radioactive I-substituted, and X = CHO, di(C1-6 alkoxy)methyl, CO₂H, NCO, OH, SH, N-(C1-6 alkyl)amino, N,N-di(C1-6 alkyl)amino, AB; A = linking group (NR₆, CO₂, O₂C, CONR₆, NR₆CO, NHCSNH, SS; R₆ = H, C1-6 alkyl); B = protein, peptide, carbohydrate, lipid of ≥2000 mol. weight, label; R₂-R₅ = C1-6 alkyl] are prepared and are useful in production of anti-PAF antibodies or as reagents in PAF immunoassays. 2-O-Acetyl-1-O-(6'-oxohexyl)-sn-glycerol-3-phosphorylcholine [prepared from cyclohexanone and HC(OMe)₃ in 8 steps] was conjugated to methylated bovine serum albumin. The conjugate was used to prepare rabbit anti-PAF serum which was used in an assay for PAF.

ST platelet activating factor analog antibody immunoassay;
acetyloxoheptylglycerolphosphorylcholine albumin conjugate;
phosphorylcholine acetyloxoheptylglycerol albumin conjugate

IT Veterinary medicine
(blood platelet-activating factor determination by immunoassay in relation to)

IT Blood analysis
Body fluid
(blood platelet-activating factor determination in, by immunoassay, antigenic and labeled analogs for)

IT Detergents
Lecithins
Ethers, uses and miscellaneous
Polyoxyalkylenes, uses and miscellaneous
RL: ANST (Analytical study)
(in blood platelet-activating factor determination in body fluid by immunoassay)

IT Antibodies
RL: ANST (Analytical study)
(to blood platelet-activating factor analogs)

IT Ethers, biological studies
RL: USES (Uses)
(Ph, in blood platelet-activating factor determination in body fluid by immunoassay)

IT Carbohydrates and Sugars, compounds
RL: ANST (Analytical study)
(acetals, in blood platelet-activating factor determination in body fluid by immunoassay)

IT Carbohydrates and Sugars, esters
RL: ANST (Analytical study)
(alditols, anhydro, esters, with fatty acids, alkyl ethers, in blood platelet-activating factor determination in body fluid by immunoassay)

IT Castor oil
RL: ANST (Analytical study)
(alkoxylated, in blood platelet-activating factor determination in body fluid by immunoassay)

IT Albumins, compounds
Carbohydrates and Sugars, compounds
Lipids, compounds
Peptides, compounds
Proteins, specific or class
RL: ANST (Analytical study)
(conjugates, with glycerolphosphorylcholine derivative, as antigenic blood platelet-activating factor analogs)

IT Enzymes
RL: ANST (Analytical study)
(conjugates, with glycerolphosphorylcholine derivs., as labeled blood platelet-activating factor analogs)

IT Fatty acids, esters
 RL: ANST (Analytical study)
 (esters, with hexitol anhydrides, alkyl ethers, in blood platelet-activating factor determination in body fluid by immunoassay)

IT Carbohydrates and Sugars, esters
 RL: ANST (Analytical study)
 (hexitols, anhydro, esters, with fatty acids, alkyl ethers, in blood platelet-activating factor determination in body fluid by immunoassay)

IT Alcohols, compounds
 RL: ANST (Analytical study)
 (long-chain, alkoxyated, acetals, in blood platelet-activating factor determination in body fluid by immunoassay)

IT Antibodies
 RL: ANST (Analytical study)
 (monoclonal, to blood platelet-activating factor analogs)

IT Detergents
 (nonionic, in blood platelet-activating factor determination in body fluid by immunoassay)

IT 25104-18-1D, Polylysine, glycerylphosphorylcholine derivative conjugates
 38000-06-5D, Polylysine, glycerylphosphorylcholine derivative conjugates
 119142-22-2D, albumin and polylysine conjugates
 RL: ANST (Analytical study)
 (as antigenic blood platelet-activating factor analogs)

IT 9005-64-5, Tween 20
 RL: ANST (Analytical study)
 (blood platelet-activating factor acetylhydrolase inactivation by, blood platelet-activating factor immunoassay in relation to)

IT 51-45-6D, 1H-Imidazole-4-ethanamine, iodine-125-labeled 51-67-2D, iodine-125-labeled 1080-06-4D, iodine-125-labeled
 RL: ANST (Analytical study)
 (blood platelet-activating factor analogs labeled with, for immunoassay)

IT 65154-06-5, Blood platelet-activating factor
 RL: ANT (Analyte); ANST (Analytical study)
 (determination of, by immunoassay, antigenic and labeled analogs for)

IT 108-95-2D, Phenol, alkyl ethers
 RL: ANST (Analytical study)
 (in blood platelet-activating factor determination in body fluid by immunoassay)

IT 76901-00-3, Platelet activating factor acetylhydrolase
 RL: ANST (Analytical study)
 (inactivation of, by Tween 20, blood platelet-activating factor immunoassay in relation to)

IT 931-56-6P, 1-Methoxycyclohexane 933-40-4P, 1,1-Dimethoxycyclohexane 18751-83-2P, 6,6-Dimethoxyhexan-1-ol 25176-55-0P, Methyl-6,6-dimethoxyhexanoate 119142-18-6P 119142-19-7P **119142-20-0P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of blood platelet-activating factor analogs)

IT **119142-21-1DP**, methylated albumin conjugates
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as immunogen for blood platelet-activating factor immunoassay)

IT 108-94-1, Cyclohexanone, reactions 149-73-5, Trimethylorthoformate 119142-17-5, (R)-1-(Benzyloxy)-2,3-epoxypropane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in preparation of blood platelet-activating factor analogs)

PRAI JP 1986-200335

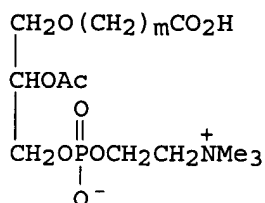
19860826 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 63054386	ICM	C07F009-10
	ICS	A61K039-395

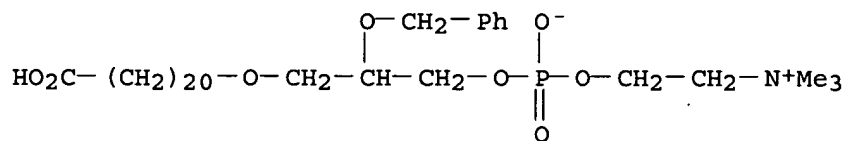
OS MARPAT 109:170803

GI

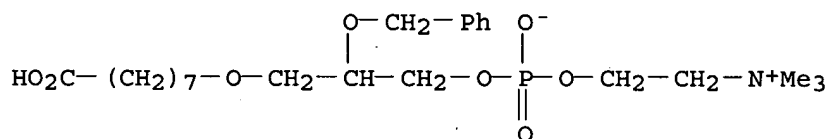


- AB The compds. I (m = integer), useful in the preparation of platelet activating factor antibodies, were prepared Hydrolysis of 2-benzyloxy-3-(7-methoxycarbonylheptyloxy)propyl 2-trimethylammonioethyl phosphate (preparation given), followed by debenzylation and acetylation, gave 2-acetoxy-3-(7-carboxyheptyloxy)propyl 2-trimethylammonioethyl phosphate (II). Condensation of II with serum albumin produced a product for use in the production of platelet activating factor antibodies.
- ST platelet activating factor antibody phospholipid; phospholipid prepn
platelet activating factor
- IT Albumins, compounds
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for preparation of platelet activating factor antibody)
- IT 65154-06-5, Platelet activating factor
RL: RCT (Reactant); RACT (Reactant or reagent)
(phospholipids for preparing antibody to)
- IT 117030-22-5P 117030-23-6P 117030-24-7P **117030-25-8P**
117030-26-9P 117030-27-0P 117030-28-1P 117030-29-2P 117030-30-5P
117030-32-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of, in preparation of phospholipids for preparing
platelet activating factor antibody)
- IT **117030-31-6DP**, complexes with serum albumin **117045-25-7DP**
, complexes with serum albumin
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for preparation of platelet activating factor antibody)
- IT 14296-16-3 89448-54-4, 2-Benzyl-3-tetrahydropyranylglycerin 92634-93-0
96270-18-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of phospholipids for preparing platelet
activating factor antibody)
- IT **117030-25-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of, in preparation of phospholipids for preparing
platelet activating factor antibody)
- RN 117030-25-8 HCAPLUS

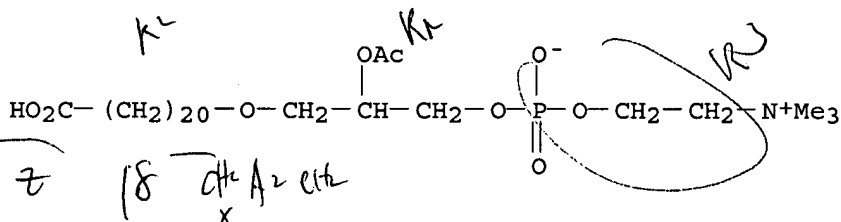
CN 3,5,9-Trioxa-4-phosphanonacosan-1-aminium, 29-carboxy-4-hydroxy-N,N,N-trimethyl-7-(phenylmethoxy)-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



IT 117030-31-6DP, complexes with serum albumin 117045-25-7DP
 , complexes with serum albumin
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, for preparation of platelet activating factor antibody)
 RN 117030-31-6 HCAPLUS
 CN 3,5,9-Trioxa-4-phosphahexadecan-1-aminium, 16-carboxy-4-hydroxy-N,N,N-trimethyl-7-(phenylmethoxy)-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 117045-25-7 HCAPLUS
 CN 3,5,9-Trioxa-4-phosphanonacosan-1-aminium, 7-(acetyloxy)-29-carboxy-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L65 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:530525 HCAPLUS
 DN 101:130525
 ED Entered STN: 13 Oct 1984
 TI 1-(ω-Carboxyalkyl)-2-alkylglycero-3-phosphatides
 IN Berchtold, Rudolf
 PA Switz.
 SO Patentschrift (Switz.), 4 pp.
 CODEN: SWXXAS
 DT Patent
 LA German
 IC C07F009-10
 CC 26-9 (Biomolecules and Their Synthetic Analogs)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CH 642665	A	19840430	CH 1979-1177	19790208 <--
PRAI CH 1979-1177		19790208	<--	

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

CH 642665 IC C07F009-10

OS CASREACT 101:130525

AB HO₂C(CH₂)_nOCH₂CH(OR)CH₂OP(O)(OH)OCH₂CH₂N+Me₃ OH⁻ (I, n = 4-22; R = C₅-23 alkyl) were prepared. Thus, (HOCH₂)₂CHO(CH₂)₁₅Me was O-benzylated and treated with Br(CH₂)₁₀CO₂Me followed by hydrogenolysis to give MeO₂C(CH₂)₁₀OCH₂CH[O(CH₂)₁₅Me]CH₂OH which was treated with BrCH₂CH₂P(O)Cl₂ and Me₃N to give MeO₂C(CH₂)₁₀OCH₂CH[O(CH₂)₁₅Me]CH₂OP(O)(O⁻)OCH₂CH₂N+Me₃. Saponification of this ester gave I [n = 10, R = (CH₂)₁₅Me].

ST carboxyalkylglycerophosphatide; glycerophosphatide carboxyalkyl; phosphatidylethanolamine carboxyalkylglycero; phosphonylcholine carboxyalkylglycero

IT Phosphatidylcholines, preparation
Phosphatidylethanolamines
RL: SPN (Synthetic preparation); PREP (Preparation)
(carboxyalkylglycero, preparation of)

IT Phospholipids
RL: SPN (Synthetic preparation); PREP (Preparation)
(carboxyalkylglycerophosphatides, preparation of)

IT 1931-78-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(benzylation of)

IT 91921-87-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and amination of)

IT 91921-96-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrazinolysis of)

IT 91921-86-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with bromoethyl dichlorophosphate)

IT 18678-95-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with bromoundecanoate)

IT 91921-88-9P 91921-90-3P 91921-92-5P 91921-94-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and saponification of)

IT 91921-89-0P 91921-91-4P 91921-93-6P 91921-95-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

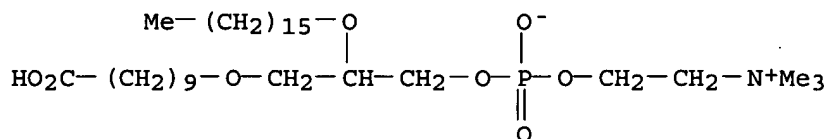
IT 6287-90-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with hexadecylglycerol)

IT 4167-02-6 52198-45-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methoxycarbonyldecyl(hexadecyl)glycerol)

IT 91921-89-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

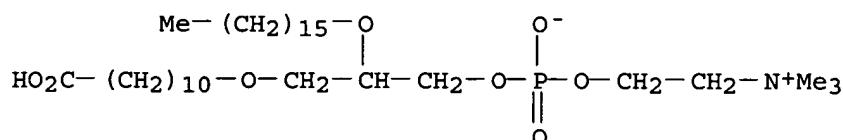
RN 91921-89-0 HCAPLUS

CN 3,5,8-Trioxa-4-phosphatetracosan-1-aminium, 7-[[[9-carboxynonyl]oxy]methyl]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L65 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1981:442295 HCAPLUS
 DN 95:42295
 ED Entered STN: 12 May 1984
 TI Synthesis of carboxyphospholipids
 AU Berchtold, Rudolf
 CS Biochem. Lab., Berne, CH-3007, Switz.
 SO Chemistry and Physics of Lipids (1981), 28(1), 55-60
 CODEN: CPLIA4; ISSN: 0009-3084
 DT Journal
 LA English
 CC 23-17 (Aliphatic Compounds)
 AB HO₂C(CH₂)₁₀OCH₂CH(OC₁₆H₃₃)CH₂OP(O)(OH)OCH₂CH₂R (R = N+Me₃OH-, NMe₂, NHMe) (I) were prepared from HOCH₂CH(OC₁₆H₃₃)CH₂OCH₂Ph by etherification with Br(CH₂)₁₀CO₂Me, debenzylation by H and Pd-C catalyst, esterification with 2-bromoethyl phosphoryldichloride, amination and hydrolysis. the CO₂H in I can bind the NH₂ groups or certain protected NH₂ groups of resins in column chromatog.
 ST phospholipid carboxyl deriv; lipid phospho carboxyl deriv; lecithin carboxy; carboxyphospholipid
 IT 4167-02-6
 RL: RCT (Reactant); RACT (Reactant or reagent) (esterification of glycerol by)
 IT 6287-90-7
 RL: RCT (Reactant); RACT (Reactant or reagent) (etherification of glycerol by)
 IT 18678-95-0P 78273-50-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and esterification of)
 IT 91921-88-9P 91921-90-3P 91921-92-5P 91921-94-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and hydrolysis of)
 IT 78273-51-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction with trimethylamines)
 IT 78273-53-7P 91921-91-4P 91921-93-6P 91921-95-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 IT 1931-78-8
 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with benzyl chloride)
 IT 74-89-5, reactions 75-50-3, reactions 100-46-9, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with bromoethyl phosphate)
 IT 52198-45-5
 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with glycerol)
 IT 100-44-7, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with hexadecylglycerol)
 IT 78273-53-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 78273-53-7 HCAPLUS
 CN 3,5,8-Trioxa-4-phosphatetracosan-1-aminium, 7-[[[10-carboxydecyl)oxy)methyl]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



=> => d his 166-

(FILE 'USPATFULL, USPAT2' ENTERED AT 09:37:19 ON 03 JUN 2005)
 L66 6 S L49

=> fil uspatall
 FILE 'USPATFULL' ENTERED AT 09:37:36 ON 03 JUN 2005
 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:37:36 ON 03 JUN 2005
 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr tot 166

L66 ANSWER 1 OF 6 USPATFULL on STN
 AN 2004:261881 USPATFULL
 TI Lysophosphatidic acid analogs and inhibition of neointima formation
 IN Tigyi, Gabor, Memphis, TN, UNITED STATES
 Baker, Daniel L., Memphis, TN, UNITED STATES
 Zhang, Chunxiang, Memphis, TN, UNITED STATES
 PI US 2004204383 A1 20041014
 AI US 2004-821739 A1 20040409 (10)
 PRAI US 2003-462274P 20030411 (60)
 DT Utility
 FS APPLICATION
 LREP Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
 CLMN Number of Claims: 18
 ECL Exemplary Claim: 1
 DRWN 12 Drawing Page(s)
 LN.CNT 1011
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The phospholipid growth factor lysophosphatidic acids (LPAs) containing unsaturated fatty acids (18:1, 18:2 and 20:4) and fatty alcohols containing hydrocarbon chains with more than 4 carbons were capable of inducing a rapid formation of neointima, an initial step in the development of atherosclerotic plaque. LPAs with saturated fatty acids did not induce neointima formation. A Peroxisome Proliferator-Activated Receptors gamma (PPARγ)-specific agonist Rosiglitazone also induced a profound formation of neointima. GW9662, a selective and irreversible antagonist of PPARγ, abolished LPA- and

Rosiglitazone-induced neointima formation, indicating that LPA-induced neointima formation requires the activation of PPAR γ . These data suggest that LPA analogs that bind to but do not activate downstream signaling of PPAR γ or antagonists of PPAR γ that inhibit PPAR γ signaling would be useful in the prevention and/or treatment of neointima formation and atherosclerosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

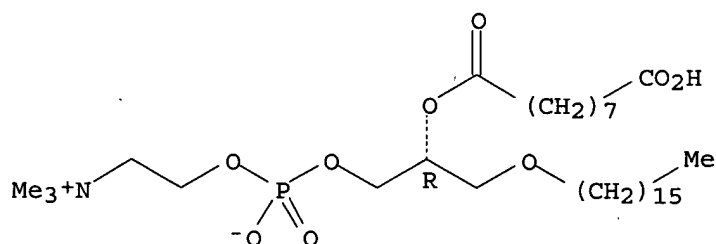
IT 354583-69-0

(lysophosphatidic acid analogs binding to but not activating peroxisome proliferator-activated receptor γ for inhibition of neointima formation)

RN 354583-69-0 USPATFULL

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-[(8-carboxy-1-oxooctyl)oxy]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L66 ANSWER 2 OF 6 USPATFULL on STN

AN 2004:139501 USPATFULL

TI Methods employing and compositions containing defined oxidized phospholipids for prevention and treatment of atherosclerosis

IN Harats, Dror, Ramat Gan, ISRAEL
George, Jacob, Tel Aviv, ISRAEL
Halperin, Gideon, Jerusalem, ISRAEL

PI US 2004106677 A1 20040603

AI US 2003-718596 A1 20031124 (10)

RLI Division of Ser. No. US 2003-445347, filed on 27 May 2003, PENDING
Continuation-in-part of Ser. No. WO 2001-IL1080, filed on 22 Nov 2001, UNKNOWN

PRAI US 2000-252574P 20001124 (60)

DT Utility

FS APPLICATION

LREP G.E. EHRLICH (1995) LTD., c/o ANTHONY CASTORINA, SUITE 207, 2001 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 9 Drawing Page(s)

LN.CNT 2198

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel synthetic forms of etherified oxidized phospholipids and methods of utilizing same for preventing and treating atherosclerosis and other related disorders, as well as inflammatory disorders, immune mediated diseases, autoimmune diseases and proliferative disorders, are provided. In addition, methods of synthesizing etherified and esterified oxidized phospholipids and of using same for preventing and treating atherosclerosis and other related disorders are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

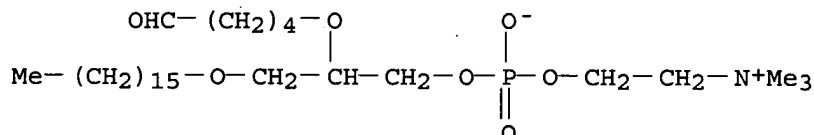
IT 431063-10-4P 431948-23-1P, D-ALLE 431948-24-2P

, L-ALLE

(immunization with; preparation of oxidized phospholipids for inducing tolerance to oxidized LDL for prevention and treatment of atherosclerosis and related disorders)

RN 431063-10-4 USPATFULL

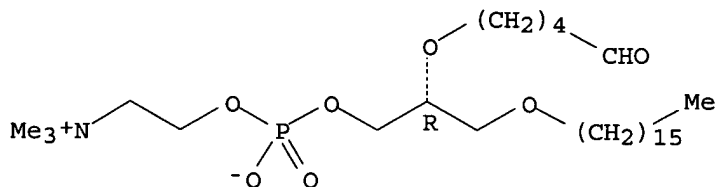
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 431948-23-1 USPATFULL

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

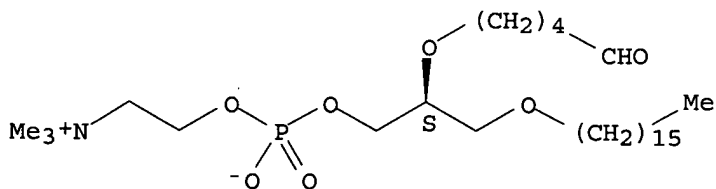
Absolute stereochemistry.



RN 431948-24-2 USPATFULL

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L66 ANSWER 3 OF 6 USPATFULL on STN

AN 2003:319286 USPATFULL

TI Methods employing and compositions containing defined oxidized phospholipids for prevention and treatment of atherosclerosis

IN Harats, Dror, Ramat Gan, ISRAEL

George, Jacob, Petah Tikva, ISRAEL

Halperin, Gideon, Jerusalem, ISRAEL

PA Vascular Biogenics Ltd. (non-U.S. corporation)

PI US 2003225035

A1 20031204

US 6838452

B2 20050104

AI US 2003-445347 A1 20030527 (10)
 RLI Continuation-in-part of Ser. No. WO 2001-IL1080, filed on 22 Nov 2001,
 UNKNOWN
 PRAI US 2000-252574P 20001124 (60)
 DT Utility
 FS APPLICATION
 LREP G.E. EHRLICH (1995) LTD., c/o ANTHONY CASTORINA, SUITE 207, 2001
 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202
 CLMN Number of Claims: 42
 ECL Exemplary Claim: 1
 DRWN 9 Drawing Page(s)
 LN.CNT 2347

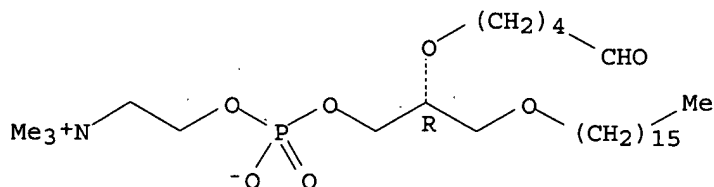
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel synthetic forms of etherified oxidized phospholipids and methods of utilizing same for preventing and treating atherosclerosis and other related disorders, as well as inflammatory disorders, immune mediated diseases, autoimmune diseases and proliferative disorders, are provided. In addition, methods of synthesizing etherified and esterified oxidized phospholipids and of using same for preventing and treating atherosclerosis and other related disorders are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

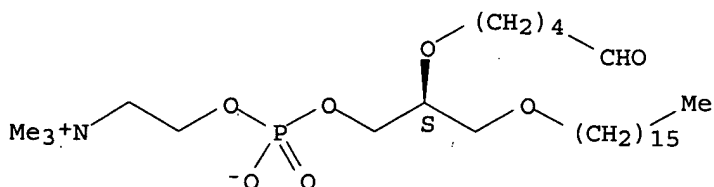
IT 431948-23-1P
 (oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)
 RN 431948-23-1 USPATFULL
 CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 431948-24-2P 630112-41-3P 630112-42-4P
 630112-43-5P
 (oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)
 RN 431948-24-2 USPATFULL
 CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7S)- (9CI) (CA INDEX NAME)

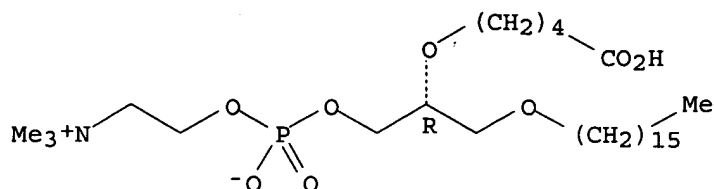
Absolute stereochemistry.



RN 630112-41-3 USPATFULL

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxybutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

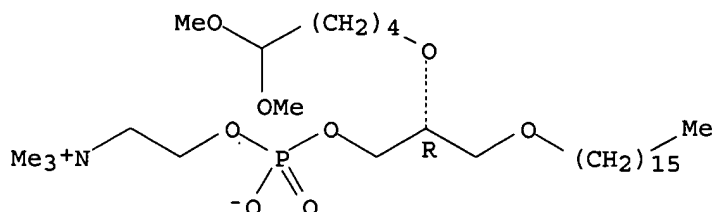
Absolute stereochemistry.



RN 630112-42-4 USPATFULL

CN 2,8,11,13-Tetraoxa-12-phosphapentadecan-15-aminium, 9-[(hexadecyloxy)methyl]-12-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 12-oxide, (9R)- (9CI) (CA INDEX NAME)

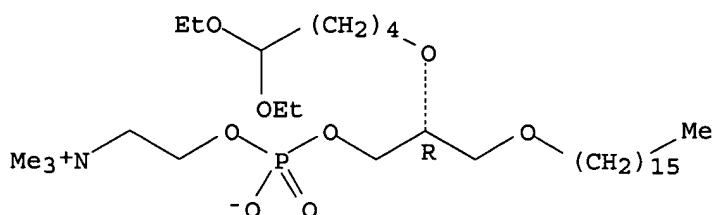
Absolute stereochemistry.



RN 630112-43-5 USPATFULL

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-[(5,5-diethoxypentyl)oxy]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L66 ANSWER 4 OF 6 USPATFULL on STN

AN 92:15153 USPATFULL

TI Substrate for phospholipase

IN Junius, Martina, Bernried, Germany, Federal Republic of
Neumann, Ulrich, Weilheim, Germany, Federal Republic of

PA Boehringer Mannheim GmbH, Mannheim, Germany, Federal Republic of

(non-U.S. corporation)

PI US 5091527 19920225

AI US 1989-318075 19890302 (7)

PRAI DE 1988-3807123 19880304

DT Utility
 FS Granted
 EXNAM Primary Examiner: Lee, Mary C.; Assistant Examiner: Ambrose, Michael G.
 LREP Felfe & Lynch
 CLMN Number of Claims: 8
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 552

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides phospholipase substrates of the general formula: ##STR1## wherein A is an alkylene or alkenylene radical containing up to 16 carbon atoms, R is a hydrogen atom or an alkyl, alkenyl or acyl radical containing up to 20 carbon atoms or an optionally alkyl-substituted aryl or aralkyl radical containing up to 8 carbon atoms in the alkyl moiety, X is the residue of an aromatic hydroxy or thiol compound and each Y, independently of one another, is an oxygen or sulphur atom and Z is --SO.sub.3.sup..crclbar. or a radical of the general formula: ##STR2## wherein R.sup.1 can be a hydrogen atom or a radical of the general formula --(CH.sub.2).sub.n NR.sub.3.sup.2, in which n is 2, 3 or 4 and R.sup.2 is a hydrogen atom or a methyl radical, or is an inositol or serine (--CH.sub.2 --CH(NH.sub.2)--COOH) or glycerol residue.

The present invention also provides a process for the optical determination of phospholipases using these substrates, as well as a reagent containing them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

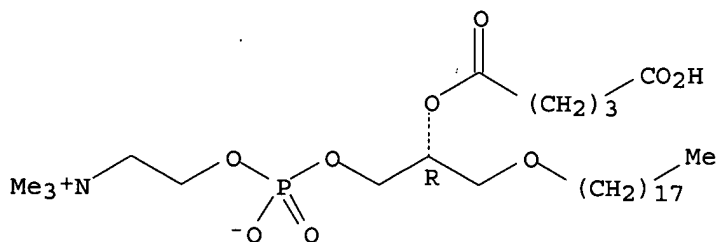
IT 125001-84-5P

(preparation of, as intermediate for phospholipase substrate)

RN 125001-84-5 USPATFULL

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 7-(4-carboxy-1-oxobutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L66 ANSWER 5 OF 6 USPATFULL on STN

AN 91:88971 USPATFULL

TI Antigenic analogues of platelet activating factor

IN Baldo, Brian A., Pymble, Australia

Redmond, John W., West Ryde, Australia

PA University of Sydney, Sydney, Australia (non-U.S. corporation)

PI US 5061626 19911029

WO 8705904 19871008

AI US 1987-156923 19871124 (7)

WO 1987-SU84 19870324

19871124 PCT 371 date

19871124 PCT 102(e) date

PRAI AU 1986-5175

19860324

DT Utility

FS Granted

EXNAM Primary Examiner: Russel, Jeffrey E.; Assistant Examiner: Kim, Kay

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 687

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns antigens for the production of antibodies to Platelet Activating Factor (PAF). The antigens are PAF analogues of formula (I) ##STR1## wherein X comprises a high molecular weight group, R.sup.1 is a linking group and R.sup.2 to R.sup.5 are selected from C.sub.1 to C.sub.6 alkyl.

Other aspects of the invention include PAF-antibodies produced using said antigens, labelled PAF analogues, intermediates for the preparation of PAF analogues and methods and a kit for the immunoassay of PAF.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

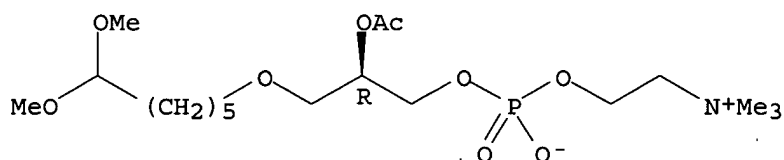
IT 119142-20-0P

(preparation and reaction of, in preparation of blood platelet-activating factor analogs)

RN 119142-20-0 USPATFULL

CN 2,9,13,15-Tetraoxa-14-phosphaheptadecan-17-aminium, 11-(acetyloxy)-14-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 14-oxide, (R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



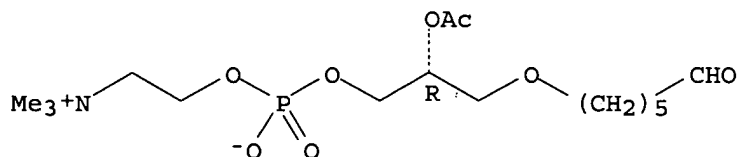
IT 119142-21-1DP, methylated albumin conjugates

(preparation of, as immunogen for blood platelet-activating factor immunoassay)

RN 119142-21-1 USPATFULL

CN 3,5,9-Trioxa-4-phosphapentadecan-1-aminium, 7-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-15-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L66 ANSWER 6 OF 6 USPAT2 on STN

AN 2003:319286 USPAT2

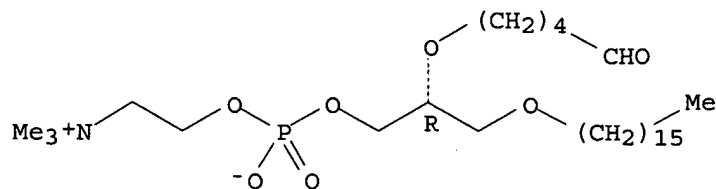
jan delaval - 3 june 2005

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-
[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

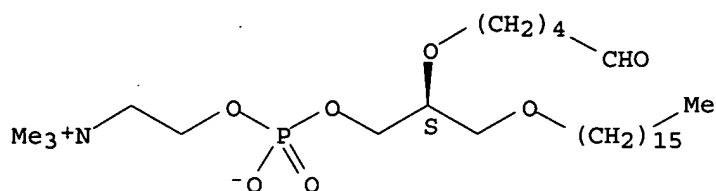
Absolute stereochemistry.



(oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders)

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-
[(5-oxopentyl)oxy]-, inner salt, 4-oxide, (7S)- (9CI) (CA INDEX NAME)

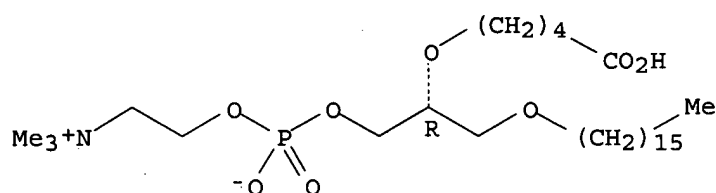
Absolute stereochemistry.



RN 630112-41-3 USPAT2

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-(4-carboxybutoxy)-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

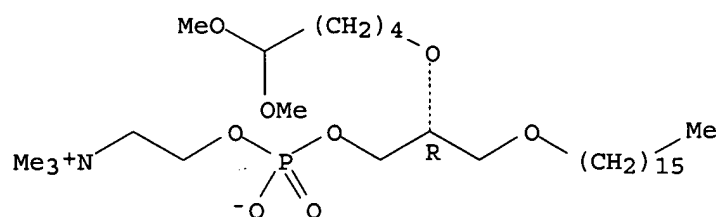
Absolute stereochemistry.



RN 630112-42-4 USPAT2

CN 2,8,11,13-Tetraoxa-12-phosphapentadecan-15-aminium, 9-[(hexadecyloxy)methyl]-12-hydroxy-3-methoxy-N,N,N-trimethyl-, inner salt, 12-oxide, (9R)- (9CI) (CA INDEX NAME)

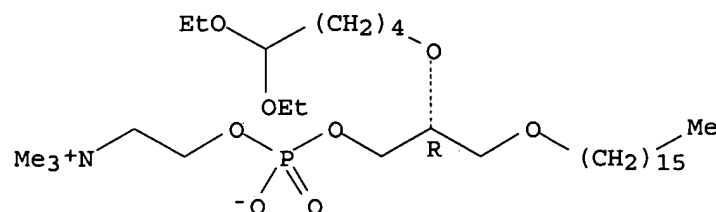
Absolute stereochemistry.



RN 630112-43-5 USPAT2

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 7-[(5,5-diethoxypentyl)oxy]-4-hydroxy-N,N,N-trimethyl-, inner salt, 4-oxide, (7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d his

(FILE 'HOME' ENTERED AT 08:38:58 ON 03 JUN 2005)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 08:39:08 ON 03 JUN 2005

L1 3 S (US6838452 OR US20030225035 OR US2004106677)/PN OR (US2003-71
L2 2 S L1 NOT RF/TI
E HARATS D/AU
L3 102 S E3,E4
E DROR/AU
E GEORGE J/AU
L4 700 S E3-E32,E35-E38
E HALPERIN G/AU
L5 81 S E3,E5,E6
E VASCULAR BIO/PA,CS
L6 7 S E15-E20
L7 2 S L2 AND L3-L6
L8 933 S (OXIDIZ? OR OXIDIS?) (S)?PHOSPHOLIPID?
E PHOSPHOLIPID/CT
L9 549 S E32+OLD,NT,PFT,RT (L) (OXIDIZ? OR OXIDIS?)
L10 825 S E58-E71 AND (OXIDIS? OR OXIDIZ?)
L11 1619 S L8-L10
L12 7 S L2-L7 AND L11
L13 7 S L2,L12
SEL RN

FILE 'REGISTRY' ENTERED AT 08:49:00 ON 03 JUN 2005

L14 43 S E1-E43
L15 STR
L16 50 S L15
L17 44013 S L15 FUL
SAV TEMP L17 SHIAO718/A
L18 STR L15
L19 2 S L18 CSS SAM SUB=L17
L20 206 S L18 CSS FUL SUB=L17
SAV L20 SHIAO718A/A
L21 STR L15
L22 12 S L21 CSS SAM SUB=L17
L23 353 S L21 CSS FUL SUB=L17
SAV L23 SHIAO718B/A
L24 STR L21
L25 10 S L24 CSS SAM SUB=L17
L26 276 S L24 CSS FUL SUB=L17
SAV L26 SHIAO718C/A
L27 STR L15
L28 494 S L23 OR L26
L29 9 S L27 SAM SUB=L28
L30 152 S L27 FUL SUB=L28
SAV L30 SHIAO718D/A
L31 6 S L14 AND L30
L32 17 S L14 AND L17
L33 11 S L32 NOT L31
L34 17 S L30 AND PMS/CI
L35 129 S L30 NOT L31,L34
L36 3 S L35 AND NC>=2
L37 1 S L36 AND C14H28NO10P
L38 126 S L35 NOT L36
L39 51 S L38 AND P/ELS

jan delaval - 3 june 2005

L40 45 S L39 AND N/ELS
L41 6 S L39 NOT L40
L42 7 S L40 AND NR>=1
L43 5 S L42 AND (C23H38NO10P OR C24H40NO10P OR C32H62NO8P)
L44 2 S L42 NOT L43
L45 38 S L40 NOT L42-L44
L46 10 S L45 AND (C23H46NO10P OR C27H55N2O9P OR C22H44NO10P OR C18H38N
L47 9 S L46 NOT 91921-89-0
L48 29 S L45 NOT L47
L49 38 S L31,L37,L44,L48
SAV L49 SHIAO718E/A

FILE 'HCAOLD' ENTERED AT 09:28:16 ON 03 JUN 2005

L50 0 S L49

FILE 'HCAPLUS' ENTERED AT 09:28:21 ON 03 JUN 2005

L51 34 S L49
L52 2 S L51 AND L2-L7,L12,L13
L53 32 S L51 NOT L52
L54 27 S L53 AND (PY<=2000 OR PRY<=2000 OR AY<=2000)
L55 1 S L49 (L) (THU OR PAC OR PKT OR DMA OR DGN)/RL AND L54
L56 2 S L49 (L) BAC/RL AND L54
L57 10 S L49 (L) BIOL+NT/RL AND L54
L58 5 S L52,L55,L56
L59 7 S L57 NOT L58
SEL DN AN 3 4
L60 2 S L59 AND E44-E49
L61 6 S L54 AND P/DT
L62 11 S L58,L60,L61
L63 18 S L54 NOT L62
SEL DN AN 7 9-15 18
L64 9 S L63 AND E50-E76
L65 20 S L62,L64

FILE 'REGISTRY' ENTERED AT 09:36:13 ON 03 JUN 2005

FILE 'HCAPLUS' ENTERED AT 09:36:40 ON 03 JUN 2005

FILE 'USPATFULL, USPAT2' ENTERED AT 09:37:19 ON 03 JUN 2005

L66 6 S L49

FILE 'USPATFULL, USPAT2' ENTERED AT 09:37:36 ON 03 JUN 2005

=>